Chapter 2 – The Alternatives

Introduction

This chapter describes a range of management alternatives considered for the Chugach National Forest, including a No Action, Preferred and six other alternatives considered in detail. These alternatives were developed to provide a range of forest management options for the next 10 - 15 years in response to public comments and resource concerns. Each of the alternatives is a potential the Revised Forest Plan that, if selected, could be implemented.

Chapter 2 is divided into the following five parts:

- discussion of how alternatives were developed;
- discussion of alternatives considered in detail and alternatives considered but eliminated from detailed study;
- discussion of the role of science;
- descriptions of the alternatives considered in detail; and,
- comparison of the alternatives considered in detail.

A large-scale map for each of the alternatives considered in detail is included in the map packet accompanying this document. The alternative maps show the locations of management prescriptions for each alternative.

Development of the Alternatives

The revision of the Forest Plan is based on an evaluation of the adequacy of the existing plan in light of changes in environmental, socio-economic and legal conditions. The core of this process was the formulation of forest management alternatives, which provided different perspectives on how this change would occur.

To develop alternatives, a collaborative learning process was implemented to emphasize early incorporation of public comments and continued public involvement. A key component of the collaborative learning process was opening Interdisciplinary Team (ID Team) meetings to the public. The Forest Supervisor also opened his staff meetings to the public. Throughout the planning process over 125 planning meetings were open to the public.

As required by NEPA, alternatives were developed using an interdisciplinary process. Because of extensive public involvement, it is important to understand each participant's role in the revision process (Table 2-1).

Table 2-1: Revision participant roles.

Roles	ID Team[1]	Science Advisors	General Public	Government Agencies	Native Governments	Forest Supervisor	Regional Forester
Lead Revision Process	X	X				X	
Write Revision Documents	X						
Critique and Evaluate Documents	X	X	X	X	X	X	
Develop Alternatives	X	X	X	X	X	X	
Consult with Governments				X	X	X	X
Make Critical Decisions						X	X

[1] Interdisciplinary Team

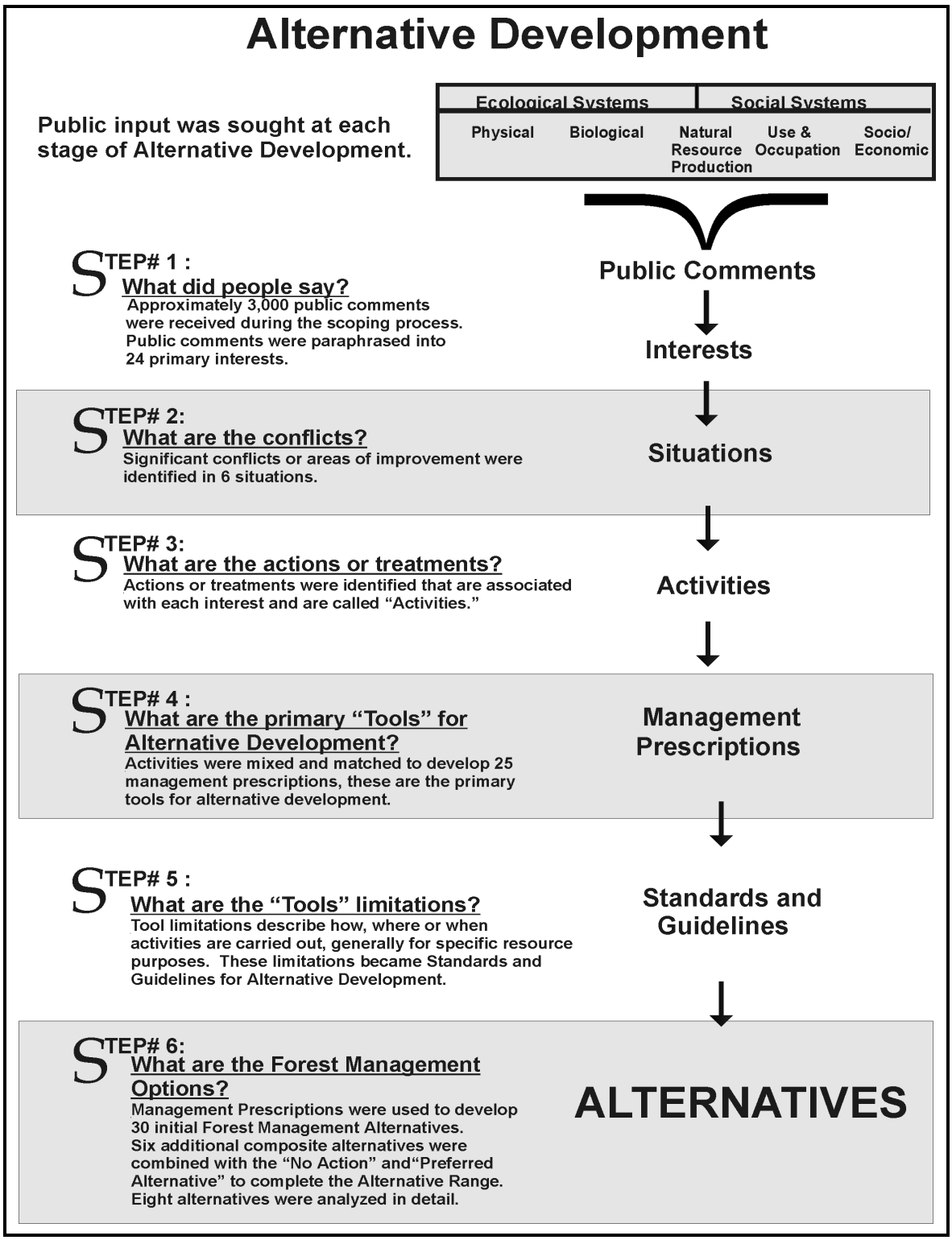
The alternative development process involved six primary steps (Figure 2-1). Participants were given an opportunity to provide input at each step.

To encourage participation by a local and national audience and to implement the six stages of alternative development, three primary communication techniques were used:

- periodic newsletters sent to those who expressed an interest;
- open Interdisciplinary Team meetings, collaborative learning workshops, and community meetings held in various communities in Southcentral Alaska; and,
- a web site, developed to disseminate information and provide further opportunities for participation.

Using these communication techniques, local communities and people from across the country participated throughout the alternative development process.

Figure 2-1: Alternative development.



The following are brief descriptions of each of the alternative development steps.

1) Interests

The first step in the collaborative learning process was determining the public's interests (desires) for the management of the Chugach National Forest. Following the publication of the Notice of Intent to revise the Forest Plan in the *Federal Register*, a newsletter was distributed and workshops were held in various communities to seek input.

Approximately 3,000 comments were received during the public comment period. Over the course of two months each comment was reviewed and categorized using a content analysis process. The result was the identification of 24 primary interests in the Chugach National Forest. Descriptions of each interest can be found in the planning record. These interests include:

- Air Quality
- Soil Productivity
- Water Quality
- Ecological Systems Management
- Habitat for Sustainable Populations of Brown Bears
- Management of Fish and Wildlife Habitat
- Threatened, Endangered and Sensitive Species
- Natural Resource Products - Forest Products
- Natural Resource Products - Minerals
- Communication Sites and Utility Corridor
- Heritage Resources
- Motorized Access
- Nonmotorized Access
- Natural Quiet
- Recreation Opportunities
- Scenic Quality
- Tourism
- Wild and Scenic Rivers
- Wilderness Designations
- Employment and Income
- Fire Protection
- Private Property Rights
- Quality of Life and Life Styles
- Subsistence

2) Situation Statements (Significant Issues)

Situation statements or situations identify where interests are in conflict or where existing conditions could be improved by changing the 1984 Forest Plan. The following situations will be the basis for alternative development:

- Ecological Systems Management;
- Habitat for Fish and Wildlife;
- Resource Development;
- Recreation/Tourism;
- Recommendations for Administrative and Congressional Designations; and,
- Subsistence.

These situation statements are described in detail in Chapter 1. The Forest Supervisor determined the six situation statements were appropriate for the comments received. Once interests and situations were identified, another newsletter was sent and a series of collaborative learning workshops were held to validate the findings.

For many of the interests there was little disagreement in a solution. These solutions became the basis for goals and objectives and standards and guidelines.

3) Activities

To address the interests, the ID Team identified activities (actions) associated with each interest. Examples of the activities include: soil/watershed projects, off highway vehicle use, personal use timber harvest. The list of activities is included in Appendix J, Management Prescription Activity Matrixes. Definitions of each of the activities are included in the Glossary.

4) Management Area Prescriptions

The next task was to identify how various activities could be mixed and matched into different management area prescriptions to address the situation statements. Management area prescriptions are various ways of managing an area of land, similar to city or borough zoning. Just as areas in a community are zoned as commercial (allowing business uses), industrial (allowing factories), or residential (allowing only homes, schools, etc.), the Forest is also "zoned" to allow or not allow various uses and activities. Land management zoning or “allocation” is done through the application of management area prescriptions (see Appendix J).

Management area prescriptions are designed to respond to different situations and in some cases interests. For example, if the situation statement is the desire for a primitive setting, the Backcountry prescription will implement a group of activities that will result in wild, undeveloped settings on a portion of the Forest.

Categories – The management area prescriptions are grouped into five categories to represent similar ecological processes, levels of development, or human influence. They range from little human influence (Category 1) to long-term human influence (Category 5):

> **Category 1** - Ecological processes such as fire, insects, and disease are allowed to operate relatively free from the direct influence of humans. Diversity resulting from natural succession and natural disturbances predominates and non-native vegetation is rare. Users must be self-reliant and should expect low levels of contact with other people. Few, if any, facilities are present. Travel is generally nonmotorized. Examples of prescriptions in this category are Primitive and Recommended Wilderness.
>
> **Category 2** - Direct human influence on the ecological processes is limited as much as possible but is sometimes evident. These areas may conserve representative or particularly rare and narrowly distributed ecological settings or components that may play a key role in the overall sustainability of larger landscapes. Habitat manipulation for conservation of species may take place. The type of human use varies but is generally not intensive. Travel may be nonmotorized or motorized. Heritage resources will appear in an

undisturbed state. Cabins and other historic, aboveground features will be present in their natural state, with minimal on-site interpretation. Data recordation is a preferred mitigation method. Examples of prescriptions in this category are Backcountry and Fish and Wildlife Conservation Area.

Category 3 - Consideration is given for both ecological processes and human occupancy. Resource management activities may occur but natural ecological processes and patterns will normally predominate, resulting in a landscape with an overall natural appearance and some evidence of human activity. Natural patterns or ecological processes are maintained or restored as a result of management activities. Forest users may expect to experience some isolation from the sights and sounds of humans in a setting that offers some challenge and risk. Motorized travel is allowed but may be restricted seasonally or to specific locations. Examples of prescriptions in this category are Fish, Wildlife and Recreation, and 501(b) - 3.

Category 4 - These areas are managed to meet a variety of ecological and human needs. Ecological processes are maintained while emphasizing selected biological structures and compositions that represent the range of natural variability. These lands are often intensively used, have a high density of facilities and roads, and may display significant evidence of vegetative manipulation. Users expect to see other humans and evidence of human activities. Examples of prescriptions in this category are Resource Development and Developed Recreation Complexes.

Category 5 - Human influences on the ecological processes are dominant and are usually evident. Changes in ecological processes are often long term. These lands are intensively used, have a high density of facilities and roads, and display significant evidence of vegetative manipulation. Users expect to see other humans and evidence of human activities. An example of a prescription in this category is Minerals.

Management Area Prescription Summary

The management area prescriptions are explained in detail in Chapter 4 of the Revised Forest Plan. Each prescription has a theme, management intent, allowed activities and a set of standards and guidelines. Each management area prescription has been assigned a unique number (the first digit represents the Prescription Category).

1. See the Management Prescription Activity Matrix in Appendix J for allowable activities by prescription.

2. Four management area prescriptions were based on Section 501(b) of the ANILCA. They are: 133 – 501(b) - Recommended Wilderness; 135 – 501(b) - 1; 213 – 501(b) – 2; and, 321 – 501(b) – 3.
3. Although the number of acres recommended for Wilderness designation in the Nellie Juan-College Fiord Wilderness Study Area vary by alternative, the Forest Service will continue to manage the entire study area for it's wilderness values. The Wilderness Study Area prescription will apply to all areas within the Nellie Juan–College Fiord Wilderness Study Area until Congress considers the Wilderness Study.
4. Three prescriptions have "winter motorized" and "summer and winter motorized" options; they are: 211 – Backcountry; 212 – Backcountry Motorized; and 213 – 501(b) – 2. When options are applied the three prescriptions are very similar; the primary difference is the Backcountry Motorized (212) Prescription allows for special use permit destination lodges while the other two prescriptions do not.
5. Two prescriptions, 135 – 501(b) – 1 and 210 – Backcountry* were developed for the FEIS Preferred Alternative.

The following is a brief summary of each management area prescription.

Category 1

111 Primitive Management Area - Primitive Areas are managed to emphasize primitive recreational opportunities in natural, unmodified landscapes.

121 Wilderness Study Management Area - The Nellie Juan-College Fiord Wilderness Study Area (WSA) is managed to maintain and protect the existing (1984) wilderness character. The WSA shall be managed as described in this prescription until Congress acts on this area. **The Wilderness Study Area Management Area does not vary by alternative.**

131 Recommended Wilderness Management Area - Recommended Wilderness is managed to maintain and protect the existing wilderness character. Recommended Wilderness shall be managed as described until Congress acts.

132 Wild River Management Area - Wild Rivers and designated segments of rivers, with their immediate environments, are managed to maintain, enhance and protect the free-flowing character and outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, or cultural values for the benefit and enjoyment of present and future generations. All hydroelectric power facilities and major water supply dams or diversions are prohibited. Wild Rivers recommended for designation in the Revised Forest Plan will be managed to maintain their outstandingly remarkable values and classification eligibility until Congress acts.

133 501(b) – Recommended Wilderness Management Area – Areas are managed concurrently to conserve fish and wildlife and their habitats and maintain wilderness character. Areas with this prescription will be recommended to Congress for Wilderness designation. The 501(b) – Recommended Wilderness Management Area will be managed as described in the prescription until Congress acts. Unresolvable conflicts between conserving fish and wildlife and their habitat and maintaining the area's potential for Wilderness designation, will be resolved by conserving fish and wildlife and their habitat as required by Section 501(b) of ANILCA.

135 501(b) - 1 – This area is managed to conserve fish and wildlife habitat in a wilderness-like setting.

141 Research Natural Area Management Area - Research Natural Areas (RNAs) form a long-term network of ecological reserves designated for non-manipulative research, monitoring, and education, and the maintenance of natural diversity, allowing natural physical and biological processes to prevail without human intervention.

142 Natural Processes Management Area - Areas are managed to let ecological processes dominate, with no human disturbance due to management activities or use. While recreation is one of several compatible human activities, this area is not a recreation-based prescription. Natural process areas recognize a range of primarily non-consumptive ecosystem values, especially intrinsic and life support values.

Category 2

210 Backcountry* - Backcountry Areas are managed to emphasize a variety of backcountry activities, including nonmotorized and motorized activities in natural appearing landscapes.

211 Backcountry Management Area - Backcountry Areas are managed to emphasize a variety of recreational backcountry activities in natural appearing landscapes. To address nonmotorized and motorized interests, three options apply to Backcountry Management Areas:

- Backcountry nonmotorized emphasis;
- Backcountry winter motorized allowed; and,
- Backcountry summer and winter motorized allowed.

212 Backcountry Motorized Management Area - Backcountry Motorized Areas are managed to emphasize a variety of recreational backcountry motorized activities in natural appearing landscapes. To address motorized and nonmotorized interests, two options apply to the Backcountry Motorized Management Areas:

- Backcountry motorized winter only; and,
- Backcountry motorized summer and winter.

213 501(b) - 2 Management Area - These lands are managed to emphasize the conservation of fish and wildlife and their habitats and provide for a variety of recreational opportunities for undeveloped activities in relatively unmodified landscapes. To address nonmotorized and motorized interests, three options apply to the 501(b) 2 Management Areas:

- 501(b) – 2 nonmotorized emphasis;
- 501(b) – 2 winter motorized allowed; and,
- 501(b) – 2 summer and winter motorized allowed.

221 EVOS Acquired Lands Management Area - As part of the *Exxon Valdez* Oil Spill Settlement, lands or interests in lands have been purchased with the goal of maintaining the land in perpetuity for conservation purposes and for the restoration of injured resources. **Management direction for these lands is established in the deeds or purchase agreements. Therefore this prescription does not vary by alternative.**

231 Scenic River Management Area - Scenic Rivers and designated segments of rivers, with their immediate environments, are managed to maintain, enhance, and protect the free-flowing character and outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, or cultural values for the benefit and enjoyment of present and future generations. All hydroelectric power facilities and major water supply dams or diversions are prohibited. Scenic River segments recommended for designation in the Revised Forest Plan will be managed to maintain their outstandingly remarkable values and classification eligibility until Congress acts.

241 Municipal Watershed Management Area - Municipal Watersheds are managed to protect the municipal water supply of communities in and adjacent to the Forest.

242 Brown Bear Core Area Management Area - Brown Bear Core Area Management Areas are managed to maintain landscapes and their associated ecological processes to provide habitat for brown bears and other wildlife species.

244 Fish and Wildlife Conservation Area Management Area - Fish and Wildlife Conservation Area Management Areas emphasize the conservation of fish and wildlife and their habitat.

Category 3

312 Fish, Wildlife and Recreation Management Area - Fish, Wildlife and Recreation Management Areas are managed to provide habitats for fish and wildlife species as well as year-round recreational opportunities with a variety of developed and dispersed settings.

313 Backcountry Groups Management Area - These areas are managed to emphasize recreational settings and opportunities with an undeveloped character but allow for larger groups and facilities to support them. This site-specific prescription is not intended to exceed 50 acres.

314 Forest Restoration Management Area - These areas are managed for a variety of uses with an emphasis on managing and/or restoring forest plant communities. The goal is to create and maintain sustainable forest conditions which prevent and/or reduce the susceptibility of forest vegetation to extensive damage from insects, disease, severe windstorm or wildfire, thus, preventing or mitigating the undesirable impacts that these disturbance processes can have on forest resource uses and values.

321 501(b) - 3 Management Area – These areas are managed to emphasize the conservation of fish and wildlife and their habitats while providing for a variety of multiple use activities.

331 Recreational River Management Area - Recreational Rivers or segments of rivers with their immediate environments are managed to maintain, enhance, and protect the free-flowing character and outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, or cultural values for the benefit and enjoyment of present and future generations. All hydroelectric power facilities and major water supply dams or diversions are prohibited. Recreational River segments recommended for designation in the Revised Forest Plan will be managed to maintain their outstandingly remarkable values and classification eligibility until Congress acts.

341 Developed Recreation / Reduced Noise Management Area - Developed Recreation / Reduced Noise Management Areas are managed to provide a range of year-round developed recreation opportunities in which human-generated noises are minimized in natural or naturally appearing landscapes. This management prescription shall apply to the site(s) identified. Other resource management activities, recreation opportunities, motorized or uses, etc. shall be guided by the management area prescription for the larger watershed.

Category 4

411 Resource Development Management Area - Resource Development Management Areas are managed for the economical and efficient production of wood fiber and special forest products and/or the prospecting, exploration, and development of minerals while developing a commodity transportation system that provides access for motorized recreation and tourism development.

441 Developed Recreation Complexes Management Area - Developed Recreation Complexes Management Areas are managed to provide developed recreation opportunities in which there are facilities for user comfort and convenience with the ability to accommodate large number of people in a naturally appearing setting.

Category 5

521 Minerals Management Area (site specific) - Minerals Management Areas are managed for the exploration, development, mining, and processing of locatable (base and precious metals, such as gold, silver, and copper, etc.), leasable (oil, gas, coal, etc.), and salable (sand, gravel, and quarry stone, etc.) minerals. This management prescription is applied to areas with currently approved plans of operations. The prescription is also used as criteria in the planning and design of proposed mineral activities and plans of operation. During the period before approval of the plan of operations, the initial Management Prescription(s) continue to apply to the project area.

522 Major Transportation / Utility Systems Management Area (site specific) - These management areas are managed for existing and future transportation and utility systems and electronic sites. These areas include corridors for state and federal highways, major oil and gas pipelines, electric power dams, reservoirs, transmission lines, including those identified by the State of Alaska and the Alaska Energy Authority, and major communication systems including telephone and microwave. This management area does not apply to Forest development roads or to roads that access private in-holdings.

5) Standards and Guidelines (Mitigation Measures)

Standards and guidelines are limitations on how, where or when activities are carried out, usually for specific resource protection purposes. The standards and guidelines represent mitigation measures for resource protection.

Two sets of standards and guidelines were developed: 1) a set of Forestwide standards and guidelines (Revised Forest Plan, Chapter 3), which apply to all alternatives; and, 2) a set of management area standards and guidelines (Revised Forest Plan, Chapter 4), which vary by management area prescription. The acreage and location of land areas assigned to management areas varies by alternative, but the prescription for each management area is the same for all alternatives.

Once the prescriptions and standards and guidelines were drafted, another newsletter was sent and a round of collaborative workshops was held to validate both products. Based on public comment and ID Team review, the standards and guidelines were modified for the Revised Forest Plan.

6) Alternatives

To facilitate the development of alternatives**,** an Alternative Development "Toolbox" was constructed. The toolbox included documents such as: planning direction, interests, situation statements (situations), standards and guidelines, management area prescriptions, activities, resource information and templates for alternative development. This toolbox was distributed to everyone who wanted to participate in alternative development. The idea was to provide an array of resource information and focus alternative development on addressing the situations.

Alternatives were developed in ID Team meetings, collaborative learning workshops, and community gatherings throughout various Southcentral Alaska communities. After six months of work, 30 comprehensive alternatives were developed. A detailed description of each alternative is available in planning record.

Table 2-2 displays the alternatives and the primary authors while the relative differences between each alternative are found in Table 2-3.

Table 2-2: Primary authors by alternative.

Alternative	Primary Authors	Alternative	Primary Authors
No Action	Interdisciplinary Team	16	Audubon Society
2	Interdisciplinary Team	17	Chugach Alaska Corp; Alaska Forest Association; Anchorage Snowmobile Club; Alaska Miners
3	Interdisciplinary Team	18	Seward Ranger District Employees
4	Interdisciplinary Team	19	National Wildlife Federation; Wilderness Society
5	Interdisciplinary Team	20	Turnagain Arm Conservation League
6	Interdisciplinary Team	21	Chugach Working Group; Alaska Center for the Environment
7	Copper River Watershed Project	25	Chugach Powder Guides
8	Focus Group – Cordova Residents	26	Cordova District Fisherman United
9	Focus Group – Cordova Residents	27	Focus Group – Girdwood Residents
10	Alaska Quiet Rights Coalition	28	Friends of Hope, Sunrise and Cooper Landing
11	Focus Group – Girdwood Residents	29	Focus Group – Hope Residents
12	Interdisciplinary Team	30	Focus Group – Hope Residents
13	Interdisciplinary Team	31	Prince William Sound Chapter of Audubon Society
14	Cordova Resident	32	Alaska Wilderness, Recreation and Tourism Association
15	Interdisciplinary Team	33	Alaska Visitors Association

Alternatives Considered in Detail and Alternatives Considered but Eliminated from Detailed Study

The Forest Supervisor directed the Interdisciplinary Team to review all 30 alternatives and to recommend a manageable number that address the range of situations.

Cluster analysis, a statistical procedure for detecting natural groupings of data, was used to determine alternatives that addressed the situations in a similar fashion. Based on the analysis the alternatives clustered into six groups. Upon further review, Alternatives 6 and 13 were removed from their associated groups. The ID Team determined that these alternatives were unique, among all alternatives, in how they addressed the situations. Alternative 6 and 13 focused predominately on resource development and Wilderness designations, respectively.

Next, a geographic information system (GIS) analysis was completed to disclose similarities and differences among alternatives in the same group. At this time an opportunity was provided for the ID Team, all alternative authors, and other members of the public to work together, with similar alternatives, to find common ground and produce one composite alternative for each group. Resource information was also reviewed to insure that all alternatives could produce the resources desired (e.g., timber was present in areas identified for Resource Development). Six composite alternatives were developed from the six groups (Alternatives A through F). A detailed description of each alternative is available

in Appendix H. The descriptions show how each alternative addresses the situations and interests and provides a narrative on the rationale behind the placement of the prescriptions.

The six composite alternatives and the outlying alternatives (6 and 13) were presented to the Forest Supervisor. He eliminated 6 and 13 from detailed analysis. He felt these alternatives were too limited in focus on how they addressed different situations. Alternative 6 focused directly on resource development while Alternative 13 focused directly on Wilderness designations. He also felt the composite alternatives addressed resource development and Wilderness designations adequately without the addition of these two alternatives.

The Forest Supervisor also eliminated from detailed study all alternatives that were used to develop the composites. He felt the composite alternatives were an adequate representation of how each of the grouped alternatives addressed the situations. Table 2-3 reflects under which group each alternative fell and the relative differences among all groups.

Table 2-3: Relative differences among grouped alternatives.

Situations	Alternative					
	Group A **4, 17 & 12**	**Group B** **3, 8 & 29**	**Group C** **11, 33, 30, 14 & 18**	**Group D** **2, 27, 5, 10, 16, 7 & 25**	**Group E** **19, 20, 26, 28 & 32**	**Group F** **9, 15, 21 & 31**
Ecological Systems	Active Management	Active Management	Mix	Natural Processes	Natural Processes	Natural Processes
Fish and Wildlife	Active Management	Active Management	Mix	Natural Processes	Natural Processes	Natural Processes
Free Use/Personal Use Forest Products	Highest	High	Moderate	Low	Low	Lowest
Commercial Forest Products	Highest	Moderate	Low	Low	Low	Lowest
Mineral Opportunities	Highest	High	Moderate	Low	Low	Lowest
Motorized Recreation – Summer	High	Highest	Moderate	Lowest	Low	Low
Motorized Recreation – Winter	Highest	High	Moderate	Lowest	Moderate	Moderate
Nonmotorized Recreation Summer	Lowest	Low	Moderate	Highest	High	High
Nonmotorized Recreation Winter	Lowest	Low	Moderate	Highest	High	High
Developed Recreation Facilities	High	Highest	Moderate	Moderate	Low	Lowest
Recreation Settings	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed
Recommended Wilderness	None	Low	Moderate	High	High	Highest
Recommended Wild and Scenic Rivers	None	Low	Moderate	High	High	Highest
Recommended Research Natural Areas	None	Low	Moderate	High	High	High
Subsistence	Lowest	Moderate	High	High	High	Highest

The Role of Science in Alternative Development and Environmental Consequences

The integration of science was a critical component in alternative development and effects analysis. The benefits of this integration result in (1) a fuller and richer set of options for decisions, (2) uncertainty and risk associated with proposed courses of action are clearly displayed, (3) increased clarity with which evidence and rationales are expressed, and (4) enhanced insights about choices that are made and thereby strengthen possibilities for adaptive management.

The role of scientists and researchers has not been to engage in taking policy positions, or to make public statements regarding approval or disapproval of policies. However, throughout all steps of this planning process, the consideration of and adherence to principles of science has been a deliberate objective of Regional and Forest decision makers, as well as ID Team members. Scientists and researchers—both of the Forest Service and of other federal and state agencies, universities, and nongovernmental organizations—have been involved at all steps. Among the responsibilities of scientists and researchers in the Revised Forest Plan have been to help in:

- gathering, synthesizing, testing, and validating information;
- identifying and quantifying risk without recommending what level of risk is appropriate;
- describing the level of confidence in technical information;
- assuring quality of information by following science protocols, including peer review;
- establishing evaluation and decision making criteria; and,
- checking for consistency between research data and decision making.

To date, several major science assessments have been conducted in order to augment existing data and knowledge, including recreation and tourism, social and economic conditions of neighboring forest communities, vegetation modeling for the Kenai Peninsula, and selected wildlife species of concern throughout the Forest. In addition, several roundtable discussion panels have been convened to bring subject matter experts together to discuss very specific issues or questions, including a forest conservation strategy, the total economic valuation of Forest market and nonmarket outputs, and brief risk assessments of potential impacts to minerals development and subsistence opportunities. In order to verify that the range of alternatives was adequate to address the six major situations identified during the scoping process, a detailed review of key findings of the science assessments was conducted prior to the approval of all alternatives.

A science consistency evaluation was completed on several sections of the DEIS including, recreation/tourism, social/economic, Kenai forest vegetation, wildlife species of concern, fish and wildlife habitat, ecological systems management and

minerals (USDA Forest Service 2001). Changes and additions were made in the FEIS to respond to these evaluations.

Alternatives Considered in Detail

Following the review of the science findings the Forest Supervisor decided to include the composite alternatives A through F for detailed study. Based on the analysis presented in this DEIS and ideas presented in the other alternatives, the Forest Supervisor decided to construct an additional alternative. Next, the ID Team completed an analysis of how each alternative responded to the science findings. The Forest Supervisor considered this analysis and finalized the following alternatives to be considered in detail: No Action (required by 40 CFR 1502.14(d)), Preferred and Alternatives A - F. After the analysis of public comments on the DEIS and Proposed Revised Forest Plan, the Forest Supervisor directed that several changes be made in the Preferred Alternative, in response to public comments. Next, the ID Team conducted an analysis of the updated Preferred Alternative and incorporated their findings into the FEIS. The Regional Forester will approve an alternative for implementation and explain the reasons for this choice in the Record of Decision that accompanies this document.

The Forest Service is reevaluating its Roadless Area Conservation rule (36 CFR 294) and is currently enjoined from implementing all aspects of the rule by the U.S. District Court, District of Idaho (U.S. District Court for the District of Idaho 2001). The Forest Service issued interim direction for Roadless Area Protection in July 2001. The No Action Alternative, the Preferred Alternative, and Alternatives A, B, C, and D propose new road construction and/or timber harvest in inventoried roadless areas (see Chapter 3, Roadless Areas). The Chugach National Forest will manage inventoried roadless lands consistent with the disposition of the final rule.

Alternative Descriptions

In the following section, each of the alternatives that were analyzed in detail is described. To understand all the components of the alternatives, the following sections should also be reviewed:

- Forestwide Direction (Chapter 3 of the Revised Forest Plan; these do not vary by alternative);
- Management area prescriptions (Chapter 4 of the Revised Forest Plan); and,
- Detailed Alternative Descriptions (FEIS, Appendix H). The detailed descriptions address how each alternative addresses the situations and interests and provides a narrative on the rationale behind the placement of the prescriptions.

The eight alternatives analyzed in detail are summarized by prescription category in Table 2-4 and Figure 2-2. The prescription categories are described on pages 2-5 and 2-6.

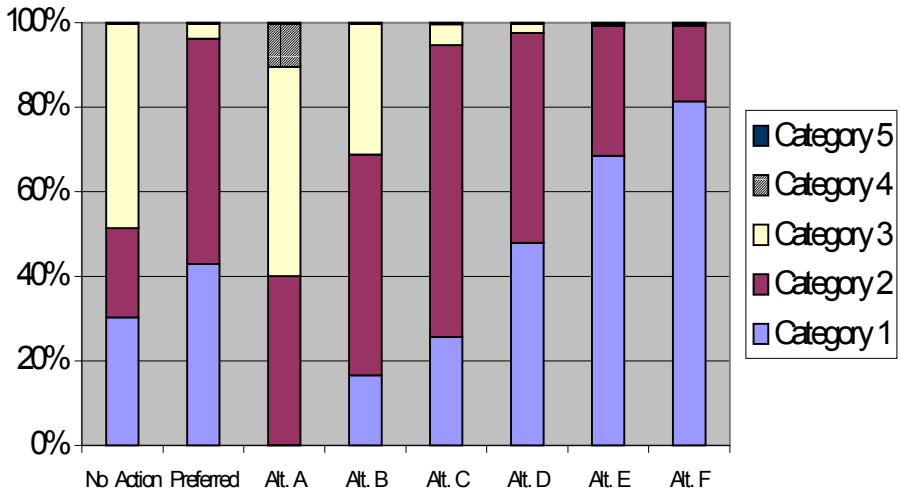
Table 2-4: Range of alternatives (in acres) by category.[1]

	Prescription Categories				
Alternative	**1**	**2**	**3**	**4**	**5**
No Action Alternative	1,662,150	1,162,040	2,654,630	0	12,760
Preferred Alternative	2,348,670	2,928,100	202,050	0	12,760
Alternative A	2,550	2,195,580	2,723,110	557,580	12,760
Alternative B	911,630	2,870,880	1,696,310	0	12,760
Alternative C	1,413,640	3,789,630	271,900	3,650	12,760
Alternative D	2,630,840	2,732,540	115,440	0	12,760
Alternative E	3,761,910	1,692,720	24,190	0	12,760
Alternative F	4,472,210	981,790	24,820	0	12,760

[1] Acres of Chugach National Forest administered land

- *Category 1* – Primitive, Wilderness Study Area, Recommended Wilderness, 501(b) - Recommended Wilderness, Wild River, Research Natural Area, 501(b) - 1
- *Category 2* – Backcountry, Backcountry Motorized, 501(b) - 2, EVOS Acquired Lands, Scenic River, Municipal Watershed, Brown Bear Core Area, Fish and Wildlife Conservation Area, Backcountry*
- *Category 3* – Fish, Wildlife and Recreation, Backcountry Groups, Forest Restoration, 501(b) - 3, Recreational River, Developed Recreation / Reduced Noise
- *Category 4* – Resource Development, Developed Recreation Complexes
- *Category 5* – Minerals, Major Transportation / Utility Systems

Figure 2-2: Graphic summary of the range of alternatives, given as percent of total Forest acreage by prescription category.



Three sets of information provide specific detail about each alternative.

1. Table 2-5 provides a relative overview of the alternatives based on their responses to the six situation statements.
2. Narratives of each alternative's responses to the situation statements are elaborated on the overview in Table 2-5.
3. Quantitative information describing each alternative is displayed in five tables at the end of the chapter, specifically:

   Table 2-10: Total number of acres in management prescriptions by alternative.

   Table 2-11: Projected outputs for key activities under full implementation level by alternative.

   Table 2-12: Fund code distribution by alternative for full implementation, based on BFES activities and costs.

Table 2-5: Relative similarities and differences between alternatives by situation.

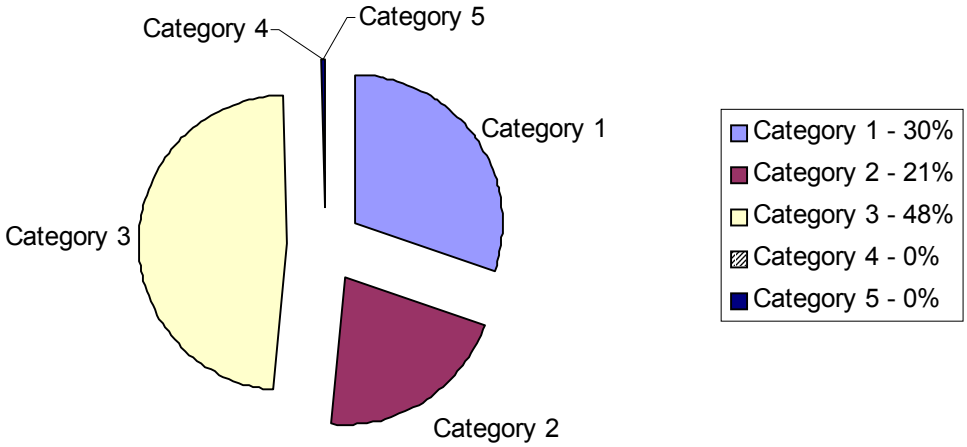
	Alternative							
Situation	**No Action**	**Preferred**	**A**	**B**	**C**	**D**	**E**	**F**
Ecological Systems	Mix	Natural Processes	Active Management	Active Management	Natural Processes	Natural Processes	Natural Processes	Natural Processes
Fish and Wildlife	Mix	Natural Processes	Active Management	Active Management	Natural Processes	Natural Processes	Natural Processes	Natural Processes
Free Use/Personal Use Forest Products	High	Moderate	Highest	High	Moderate	Low	Low	Lowest
Commercial Forest Products	Moderate	Low	Highest	Moderate	Low	Low	Low	Lowest
Mineral Opportunities	Moderate	Moderate	Highest	High	High	Low	Low	Lowest
Motorized Recreation – Summer	Moderate	Moderate	Moderate	Highest	Moderate	Lowest	Low	Low
Motorized Recreation– Winter	High	High	Highest	High	Moderate	Lowest	Moderate	Moderate
Nonmotorized Recreation – Summer	Moderate	High	Moderate	Lowest	Moderate	Highest	High	High
Nonmotorized Recreation – Winter	Low	Moderate	Lowest	Low	Moderate	Highest	High	High
Developed Recreation Facilities	Moderate	Moderate	High	Highest	Moderate	Moderate	Low	Lowest
Recreation Settings	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed	Dispersed
Recommended Wilderness	Moderate	Moderate	None	Low	Moderate	High	High	Highest
Recommended Wild and Scenic Rivers	None	Moderate	None	Low	Moderate	High	High	Highest
Recommended Research Natural Areas	Highest	Moderate	Lowest	Moderate	Moderate	High	High	High
Subsistence	High	High	Lowest	Moderate	High	High	High	Highest

No Action

The No Action Alternative represents "no change to current management" and is, therefore, the 1984 Forest Plan expressed in the management area prescriptions to be used as a basis of comparison with other alternatives using the same terms and outputs. This "translation" allows the 1984 Forest Plan to be compared with other alternatives using the same terms and outputs. The primary theme of this alternative is a mix of recreational opportunities, Wilderness recommendations, wildlife and fish habitat, minerals, and forest products.

The No Action Alternative provides a mix of active and natural processes to sustain ecological systems and fish and wildlife habitat. It provides a mix of motorized/nonmotorized recreational activities, facilities, and recreational settings. The No Action Alternative provides a variety of natural resource products including forest products and minerals. It recommends Wilderness in portions of the Forest. Wild and Scenic Rivers were not addressed. A network of Research Natural Areas is recommended. Subsistence activities are emphasized.

Figure 2-3: No Action Alternative area allocations, by category.



**NOTE: Category 4 = 0.00% and Category 5 = 0.23%.

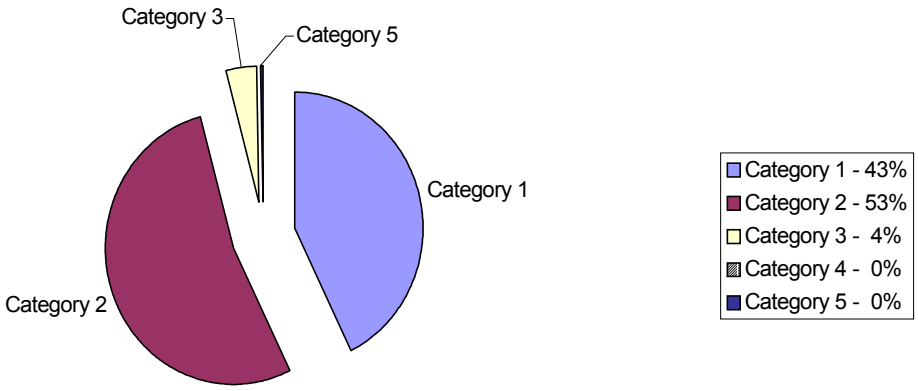
- *Category 1* – Wilderness Study Area; Recommended Wilderness; Research Natural Area
- *Category 2* – Backcountry; 501(b) - 2; EVOS Acquired Lands; Municipal Watershed; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; 501(b) - 3
- *Category 5* – Minerals; Major Transportation / Utility Systems

Preferred Alternative

This alternative is the Regional Forester's Preferred Alternative. The primary theme of this alternative is conserving fish and wildlife habitat while providing recreational opportunities. Some changes have been made in the Preferred Alternative in the Final EIS, in response to public comment and ID Team review. (see Preface, Summary of Changes in the FEIS Preferred Alternative). However, these changes did not significantly affect outputs or the effects analysis.

The Preferred Alternative emphasizes natural processes across most of the Forest with active management in selected locations to sustain ecological systems and fish and wildlife habitat. It emphasizes winter motorized recreation, summer nonmotorized recreation, recreation facilities adjacent to existing roads and some marine waters, and undeveloped recreation settings across most of the Forest. The Preferred Alternative provides personal use/free use and small-scale commercial forest products to meet Forest stewardship objectives. It provides mineral opportunities in most areas with moderate to high mineral potential. It emphasizes Wilderness recommendations and provides a mix of Wild and Scenic River and Research Natural Area recommendations. Subsistence activities are emphasized.

Figure 2-4: Preferred Alternative area allocations, by category.



**NOTE: Category 4 = 0.00% and Category 5 = 0.23%.

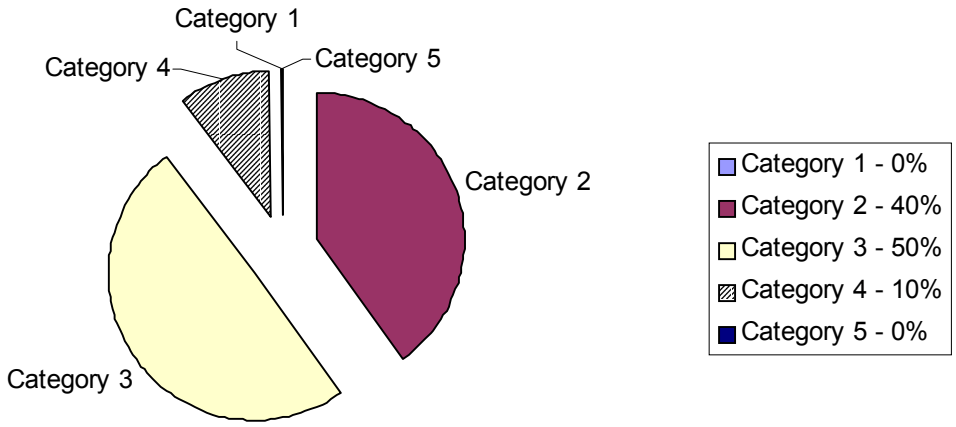
- *Category 1* – Primitive; Wilderness Study Area; Recommended Wilderness; 501(b) - Recommended Wilderness; Wild River; Research Natural Area; 501(b) - 1
- *Category 2* – Backcountry *; 501(b) - 2; EVOS Acquired Lands; Scenic River; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; Backcountry Groups; Forest Restoration; 501(b) - 3; Recreational River; Developed Recreation / Reduced Noise
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative A

The primary theme of this alternative is providing opportunities for active management (forest products, minerals, recreation etc.) while maintaining a predominately undeveloped setting across most of the Forest.

Alternative A emphasizes active management to sustain ecological systems and fish and wildlife habitat. It emphasizes motorized recreation (primarily winter), developed facilities, and a variety of recreational settings. Alternative A emphasizes personal use/free use and commercial forest products. It emphasizes mineral opportunities across the Forest. No Wilderness or Wild and Scenic Rivers are recommended. One Research Natural Area currently exists. Subsistence activities are emphasized.

Figure 2-5: Alternative A area allocations, by category.



**NOTE: Category 1 = 0.05% and Category 5 = 0.23%.

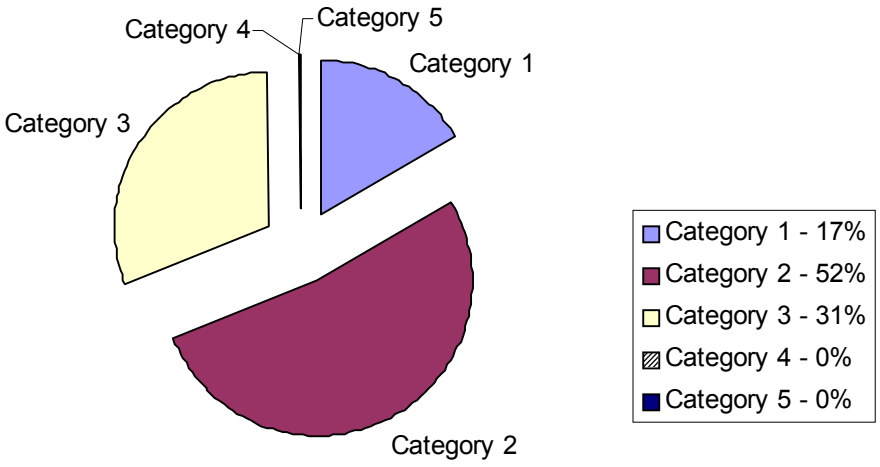
- *Category 1* –Research Natural Area
- *Category 2* –Backcountry Motorized; EVOS Acquired Lands; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; Forest Restoration; 501(b) - 3
- *Category 4* – Resource Development
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative B

The primary theme of this alternative is conserving fish and wildlife habitat while providing opportunities for active management (forest products, minerals, recreation, etc.).

Alternative B emphasizes active management to sustain ecological systems and fish and wildlife habitat. It emphasizes motorized recreation (both summer and winter), developed facilities, and a variety of recreational settings. Alternative B emphasizes personal use/free use and commercial forest products to meet Forest stewardship objectives. It provides mineral opportunities across most of the Forest. Some Wilderness, Research Natural Areas, and Wild and Scenic Rivers are recommended. Subsistence activities are emphasized.

Figure 2-6: Alternative B area allocations, by category.



**NOTE: Category 4 = 0.00% and Category 5 = 0.23%.

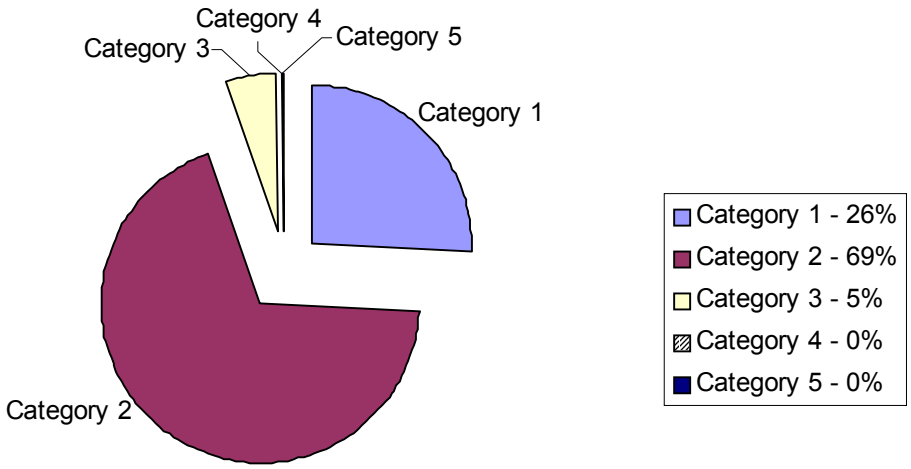
- *Category 1* – Primitive; Wilderness Study Area; Recommended Wilderness; Research Natural Area
- *Category 2* – Backcountry; Backcountry Motorized; 501(b) - 2; EVOS Acquired Lands; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; Forest Restoration; 501(b) - 3; Recreational River
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative C

The primary theme of this alternative is conservation of fish and wildlife and recreation.

Alternative C provides a mix of active management and natural processes to sustain ecological systems and fish and wildlife habitat. It emphasizes winter and summer motorized recreation, recreational facilities adjacent to existing roads and marine waters, and undeveloped recreation settings across most of the Forest. Alternative C provides personal use/free use and small-scale commercial forest products to meet Forest stewardship objectives. It provides mineral opportunities in most areas with moderate to high mineral potential. It provides some Wilderness, Wild and Scenic River, and Research Natural Area recommendations. Subsistence activities are emphasized.

Figure 2-7: Alternative C area allocations, by category.



**NOTE: Category 4 = 0.07% and Category 5 = 0.23%.

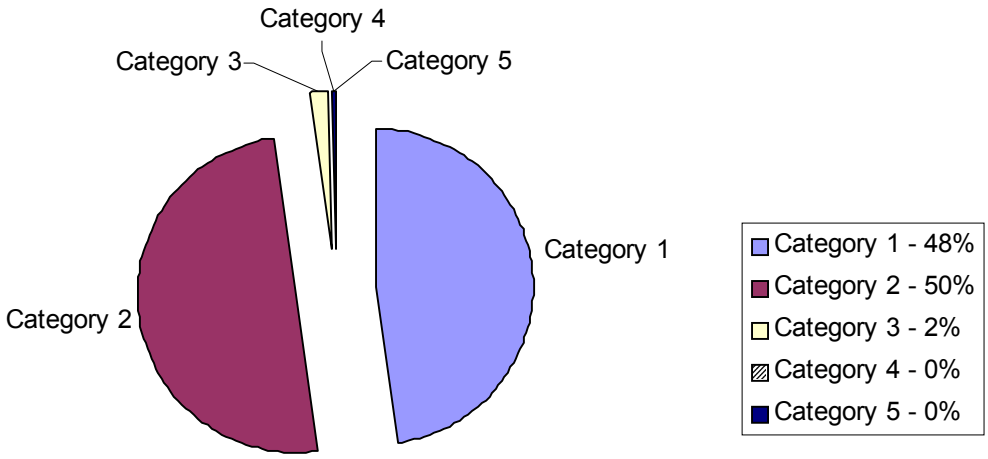
- *Category 1* – Primitive; Wilderness Study Area; Recommended Wilderness; 501(b) - Recommended Wilderness; Wild River; Research Natural Area
- *Category 2* – Backcountry; Backcountry Motorized; 501(b) - 2; EVOS Acquired Lands; Scenic River; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; Backcountry Groups; Forest Restoration; 501(b) - 3; Recreational River
- *Category 4* – Resource Development; Developed Recreation Complexes
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative D

The primary theme of this alternative is nonmotorized opportunities, natural quiet, natural processes, minimal recreational facilities, and undeveloped recreational settings.

Alternative D emphasizes natural processes to sustain ecological systems and fish and wildlife habitat. This alternative emphasizes nonmotorized activities and natural quiet more than any other alternative. It emphasizes minimal recreation facilities. It emphasizes undeveloped recreational settings. Alternative D provides personal use/free use forest products and small-scale forest products to meet Forest stewardship objectives. Large areas are recommended to be withdrawn from future mineral entry. It emphasizes Wilderness, Wild and Scenic River and Research Natural Area recommendations. Subsistence activities are emphasized.

Figure 2-8: Alternative D area allocations, by category.



**NOTE: Category 4 = 0.00% and Category 5 = 0.23%.

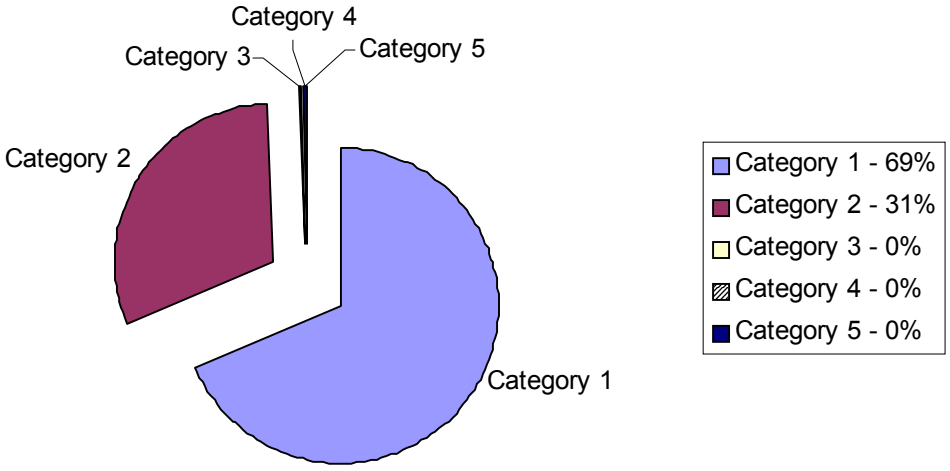
- *Category 1* – Primitive; Wilderness Study Area; Recommended Wilderness; 501(b) - Recommended Wilderness; Wild River; Research Natural Area
- *Category 2* – Backcountry; Backcountry Motorized; 501(b) - 2; EVOS Acquired Lands; Scenic River; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; 501(b) - 3; Developed Recreation / Reduced Noise; Developed Recreation Complexes
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative E

The primary theme of this alternative is natural processes, nonmotorized recreational activities, minimal recreational facilities, and undeveloped recreational settings.

Alternative E provides natural processes to sustain ecological systems and fish and wildlife habitat. It emphasizes nonmotorized recreational activities (except for traditional motorized activities allowed in ANILCA). It emphasizes minimal recreational facilities. It emphasizes undeveloped recreational settings. Alternative E emphasizes personal use/free use forest products and small-scale forest products to meet Forest stewardship objectives. Large areas are recommended to be withdrawn from future mineral entry. It emphasizes Wilderness, Wild and Scenic River, and Research Natural Area recommendations. Subsistence activities are emphasized.

Figure 2-9: Alternative E area allocations, by category.



**NOTE: Category 3 = 0.44%, Category 4 = 0.00% and Category 5 = 0.23%.

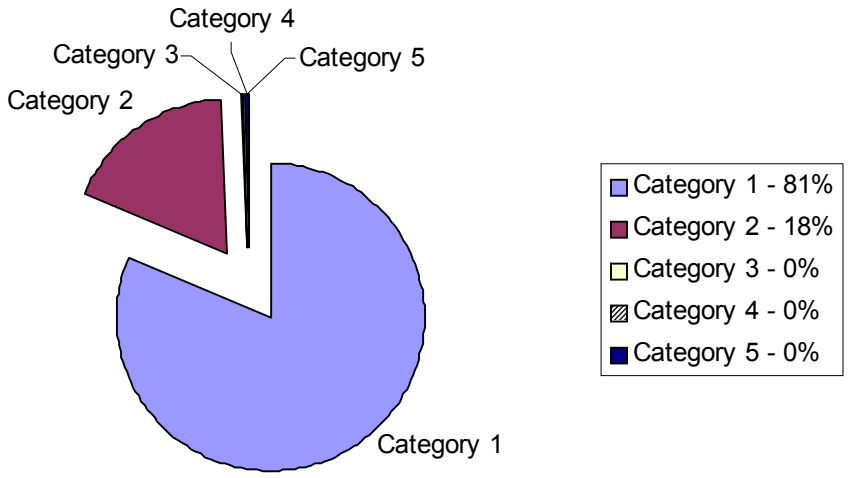
- *Category 1* – Primitive; Wilderness Study Area; Recommended Wilderness; 501(b) - Recommended Wilderness; Wild River; Research Natural Area
- *Category 2* – Backcountry; Backcountry Motorized; 501(b) - 2; EVOS Acquired Lands; Scenic River; Municipal Watershed; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; 501(b) - 3; Recreational River; Developed Recreation / Reduced Noise
- *Category 5* – Minerals; Major Transportation / Utility Systems

Alternative F

The primary theme of this alternative is natural processes, nonmotorized recreational activities, minimal recreational facilities, and undeveloped recreational settings.

Alternative F emphasizes natural processes to sustain ecological systems and fish and wildlife habitat. It emphasizes nonmotorized recreational activities (except for traditional motorized activities allowed in ANILCA). It emphasizes minimal recreational facilities. It emphasizes undeveloped recreational settings. Alternative F provides personal use/free use forest products to meet Forest stewardship objectives. Large areas are recommended to be withdrawn from future mineral entry. It emphasizes Wilderness, Wild and Scenic River and Research Natural Area recommendations. Subsistence activities are emphasized.

Figure 2-10: Alternative F area allocations, by category.



**NOTE: Category 3 = 0.45%, Category 4 = 0.00% and Category 5 = 0.23%.

- *Category 1* – Wilderness Study Area; Recommended Wilderness; Wild River; Research Natural Area
- *Category 2* – Backcountry; Backcountry Motorized; EVOS Acquired Lands; Scenic River; Municipal Watershed; Brown Bear Core Area; Fish and Wildlife Conservation Area
- *Category 3* – Fish, Wildlife and Recreation; 501(b) - 3; Recreational River; Developed Recreation / Reduced Noise
- *Category 5* – Minerals; Major Transportation / Utility Systems

Comparison of the Alternatives Considered in Detail

This section is a summary of the environmental consequences presented in Chapter 3. It reviews the differences among alternatives as they relate to each of the six situations. Refer to Chapter 3 of the FEIS and the Appendixes for additional information and resources and environmental consequences. Appendix F displays how roads, trails and routes would be managed for public access for each alternative.

Ecological Systems Management

The Ecological Systems Management Situation has two primary components:

- the effect of each alternative on maintaining intact ecological systems and their associated elements of biological diversity; and,
- the social preference each alternative implements for either active management or natural processes to maintain ecological systems.

Maintaining Ecological Systems and Biological Diversity

All alternatives maintain intact ecological systems on the Chugach National Forest and their associated elements of biological diversity. The existing proportions of vegetation types would not change significantly under any alternative. The proportion of forest structural classes would not vary among alternatives on a Forestwide basis. At a more site-specific scale, the No Action Alternative and Alternative A would allow the greatest amount of active management activities, resulting in the maintenance of a larger proportion of early successional conditions on the Kenai Peninsula.

The habitat diversity of the Chugach would not be adversely affected under any alternative. The risk of major impacts to any bioenvironmental type is low in all alternatives. While risks are minimal on a Forestwide scale, the No Action Alternative and Alternative A with the greatest proportion of bioenvironmental classes in Category 3, 4, and 5 prescriptions, present greater risks within certain bioenvironmental classes than the remaining alternatives (Figure 2-11).

The amount of active reforestation of spruce bark beetle-impacted forest on the Kenai Peninsula varies by alternative. The No Action Alternative and Alternatives A and B allow the greatest opportunities for active reforestation of high mortality beetle-infested spruce stands on the Kenai Peninsula, with the Preferred Alternative and Alternative C allowing slightly less (Figure 2-12).

Social Preference for Active Management or Natural Processes

Prescription Categories can generally be used to reflect an alternative's emphasis for Active Management or Natural Processes (see Figure 2-2). Category 1 and 2 prescriptions emphasize natural processes, while Category 3 – 5 prescriptions provide for active management.

To maintain ecological systems, Alternatives A and B focus on active management. The No Action Alternative provides a fairly even split between active management and natural processes (52 percent and 48 percent,

respectively). The Preferred Alternative and Alternatives C – F focus on natural processes to maintain ecological systems.

Figure 2-11: Bioenvironmental classes of the Chugach National Forest with at least 12 percent of area in Category 1 or 2 prescriptions by alternative.

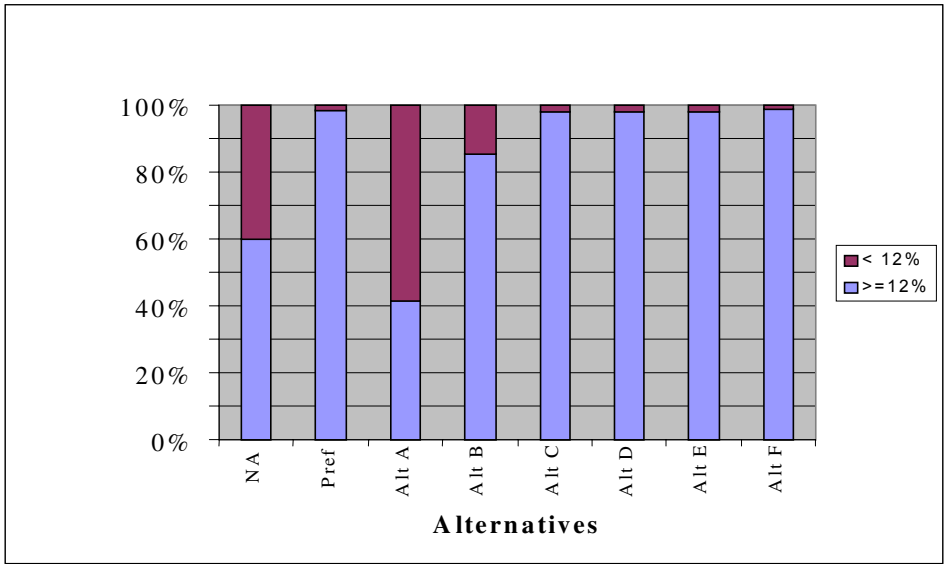
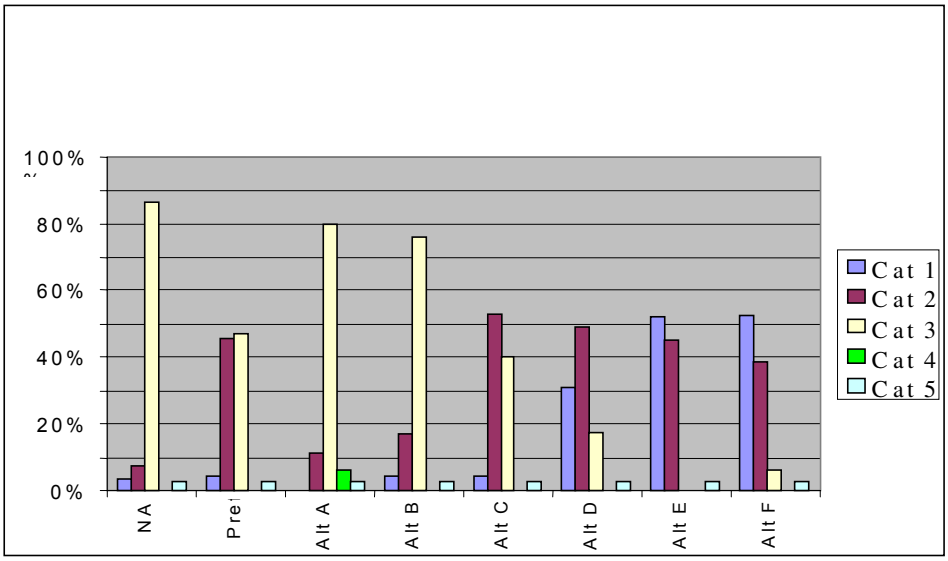


Figure 2-12: Percent of Kenai portion of Chugach National Forest heavily infested by spruce bark beetle (mapped as infested for 3+ years) by prescription category and alternative.



Habitat for Fish and Wildlife

The Habitat for the Fish and Wildlife Situation has three primary components:

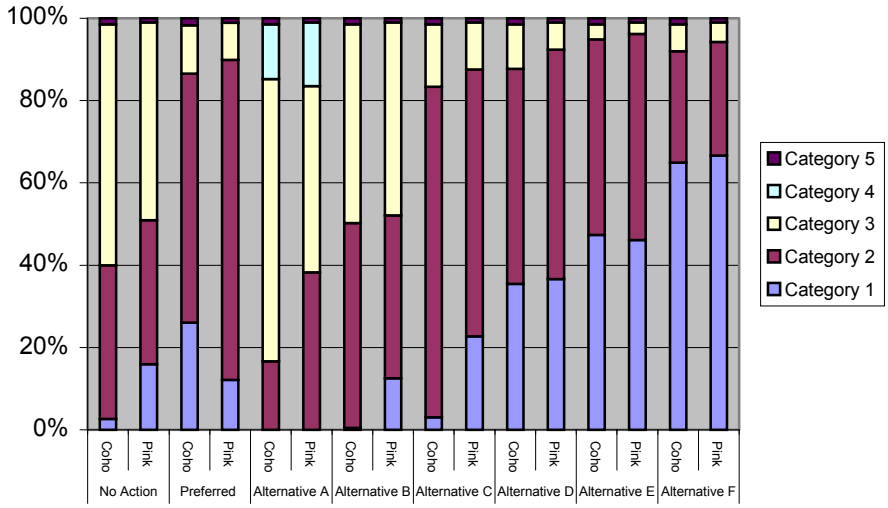
- the effect of each alternative on aquatic ecosystems and essential fish habitat;
- the effect of each alternative on wildlife habitat; and,
- the social preference each alternative implements for either active management or natural processes to maintain habitat for fish and wildlife.

Aquatic Ecosystems and Essential Fish Habitat

The primary criteria used to evaluate the eight alternatives and determine their impact on fisheries and aquatic habitat (relative risk ranking) include miles of proposed roads, acres of proposed harvest, areas of increased intense recreation, and amount of fisheries habitat restoration and improvement. Alternatives A, No Action, and B propose slightly higher levels of management activities, and have higher probability of creating adverse effects. Alternatives C, D, E, F, and the Preferred Alternative have most watersheds, and particularly those more productive watershed associations, placed in Category 1 or 2 prescriptions. The risks of adverse effects are greatly reduced with proper mitigation measures, including Best Management Practices and implementation of standards and guidelines to protect aquatic habitat under all of the alternatives. Figure 2-13 shows the percentage of coho and pink salmon habitat by prescription category.

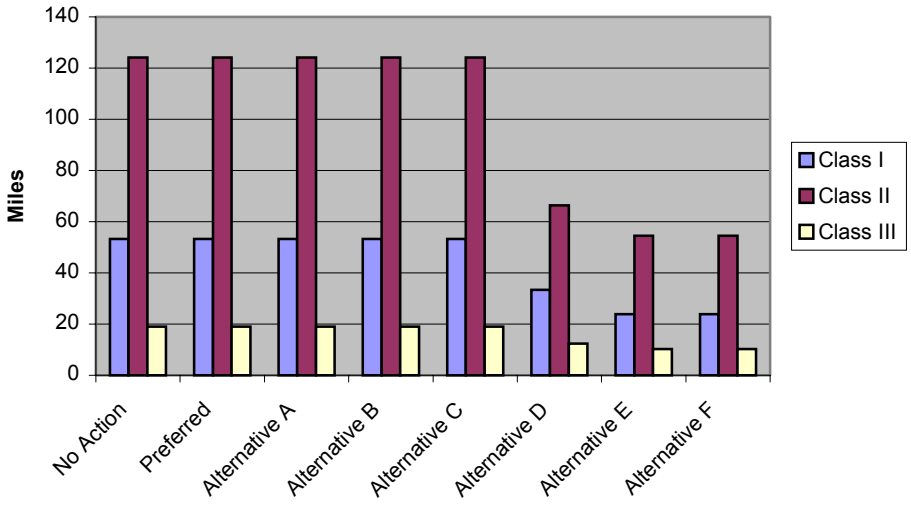
To determine the potential risk to spawning and rearing habitat, the percentage of the anadromous fish habitat that is within the five prescription categories was analyzed. Low prescription categories have lower levels of management actions. Higher prescription categories have higher levels of management actions. Alternatives that have large percentages of Category 1 and 2 prescriptions, with their low level of ground disturbing activities, have a low probability of altering the structure and function of fish habitat. Those alternatives also have less risk for potential negative effects on aquatic habitats.

Figure 2-13: Percentage of coho and pink salmon habitat by prescription category.



The spruce bark beetle and timber harvest has resulted in a loss of riparian vegetation on the Kenai Peninsula. This creates a potential long-term loss of streamside vegetation affecting bank stability, shade, nutrient input, and large woody debris. The amount of streamside restoration activities are limited by amount of Recommended Wilderness prescription applied. Figure 2-14 depicts the amount of restoration by alternative.

Figure 2-14: Potential stream class I, II and III restoration miles.



The amount of fisheries habitat improvement activities does not vary significantly among alternatives, except for Alternatives D, E and F, which have fewer activities.

Habitat for Wildlife

Forestwide standards and guidelines are sufficient to maintain sustainable populations of all wildlife species under all alternatives. All alternatives would provide sufficient habitat for viable populations, well distributed through a combination of land allocations and management area prescriptions. There are differences among alternatives for some species due to certain management activities.

Analysis shows that for all species habitat is of sufficient quality, distribution, and abundance to allow the species to maintain breeding populations distributed across the Chugach National Forest. However, some local populations are more ephemeral because of reduced population levels and increased susceptibility to environmental extremes and stochastic (random) events associated with reduced habitat abundance and distribution. Vacated habitats may become recolonized in the future.

Overall, all alternatives represent a low level of risk of not maintaining viable populations because (1) large landscapes will have minimum disturbance and will have intact systems and processes and (2) managed landscapes will be within the range of natural viability.

Social Preference for Active Management or Natural Processes

Prescription categories can generally be used to reflect an alternative's emphasis for Active Management or Natural Processes. (see Figure 2-2: Alternatives by Prescription Category.) Category 1 and 2 prescriptions emphasize natural processes while Category 3 – 5 prescriptions provide for active management.

To maintain fish and wildlife habitat, Alternatives A and B focus on active management. The No Action Alternative provides a fairly even split between active management and natural processes (52 percent and 48 percent respectively). The Preferred Alternative focuses on natural processes or active management that mimics natural processes to maintain fish and wildlife habitat. Alternatives C, D, E, and F focus on natural processes to maintain fish and wildlife habitat.

Resource Development

The Resource Development Situation has two primary components:

- the effect of each alternative on providing mineral opportunities; and,
- the effect of each alternative on providing forest products.

Minerals

Under the General Mining Law of 1872, national forest lands are available for mineral exploration and prospecting, and for mineral development and production, unless the lands are specifically withdrawn from all forms of mineral entry. Lands in the Copper River addition, while not subject to the General

Mining Law of 1872, are subject to the Mineral Leasing Act of March 4, 1917 (ANILCA, Sec. 502). The Forest Service can request the Bureau of Land Management to withdraw certain areas from all forms of mineral entry if necessary to meet the intent of the management area prescription. In addition, lands designated by Congress for Wilderness and Wild River status are also withdrawn from mineral entry in order to fulfill the purposes of those designations. (Such withdrawals are subject to any existing valid mineral rights.) When the Record of Decision is issued for the selected alternative, the Forest Service may request that the Bureau of Land Management withdraw certain management areas, such as Research Natural Areas, from any and all forms of mineral entry. Some management areas, such as Wilderness, would be withdrawn when designated by Congress. Table 2-6 displays the amount of area recommended for withdrawal by alternative.

Alternatives vary on the amount recommended for mineral withdrawal based on the emphasis of each alternative. The least amount of land that could be withdrawn is in Alternative A, where only 0.2 percent would either be recommended for withdrawal or withdrawn upon designation. The most land proposed for withdrawal would be in Alternative F at 80.9 percent.

Table 2-6: Lands/mineral estate recommended for withdrawal.

Mineral Potential	Alternative							
	No Action	Preferred	A	B	C	D	E	F
Total Acreage Recommended for Withdrawal[1]	1,668,990	1,897,670	9,390	829,750	1,057,100	2,227,750	2,862,180	4,445,200
Percent Recommended Withdrawn	30.4%	34.6%	0.2%	16.3%	19.2%	40.6%	52.1%	80.9%

[1] Includes lands that may be recommended for withdrawal (Research Natural Area, Developed Recreation Complex, etc.) or would be withdrawn upon designation (Wilderness, Wild River, etc.)

Forest Products

The Forest Products component is displayed in two categories: Forest Products (Chargeable) from suitable timberlands and Forest Products (Nonchargeable) from unsuitable forest lands. Chargeable refers to commercial timber sales where an ASQ (Allowable Sale Quantity) has been calculated and the timberlands are managed for the continuous production of wood fiber for industrial wood use. Nonchargeable forest lands may include harvest of timber products, but an ASQ is not calculated and the harvest is made to meet Forest stewardship objectives such as fuel reduction, wildlife habitat improvement or insect and disease suppression or to provide free use/personal use forest products.

Allowable Sale Quantity (ASQ) refers to the upper level of scheduled commercial timber harvest to meet demands for forest products. The harvest would come from lands identified as suitable for timber production. Alternatives A, B and the No Action would have an allowable sale quantity (Table 2-7).

Table 2-7: Annual allowable sale quantity (chargeable).

Key Indicators	Unit of Measure	Time Period	Alternative							
			No Action	Preferred	A	B	C	D	E	F
Allowable Sale Quantity (ASQ)										
ASQ - Cubic	MMCF	Annual	1.6	0	3.5	1.3	0	0	0	0
ASQ – Board Feet	MMBF	Annual	7.5	0	16.3	6.1	0	0	0	0
ASQ – Harvest Acres	Acres	Annual	370	0	771	292	0	0	0	0

Nonchargeable timber harvest provides incidental forest products to meet objectives such as fuel reduction, wildlife habitat improvement, insect and disease suppression and free use/personal use forest products. All alternatives provide some level of nonchargeable harvest (Table 2-8). Actual harvest depends on the demand and level of Forest Service funding.

Table 2-8: Vegetation management (nonchargeable).

Key Indicators	Unit of Measure	Time Period	Alternative							
			No Action	Preferred	A	B	C	D	E	F
Nonchargeable - Cubic	MMCF	Annual	0.63	0.43	0.73	0.63	0.43	0.31	0.25	0.23
Nonchargeable – Board Feet	MMBF	Annual	2.21	1.51	2.71	2.51	1.71	1.00	0.80	0.70
Nonchargeable – Harvest Acres	Acres	Annual	601	375	759	712	426	355	260	235

Recreation and Tourism

The analysis of environmental effects for recreation and tourism compares the differences in the alternatives' response to three primary questions:

1. What are the differences among alternatives in recreation settings and with the existing, inventoried Recreation Opportunity Spectrum (ROS) classes?
2. How do the alternatives respond to anticipated increases in recreation use by providing new infrastructure and capacity?
3. How will the alternatives improve significant situations related to recreation and user conflicts or situations, primarily winter motorized and nonmotorized recreation opportunities on the Kenai Peninsula?

These three questions and the factors they address summarize the key indicators that affected development of each alternative. Each alternative emphasizes a different mix of recreation settings, infrastructure and capacity, and reduction of user conflicts consistent with the theme of the alternative. Across the range of alternatives, all the different interests of the Recreation/Tourism Situation are addressed.

Summary of Recreation Consequences by Alternative

This section provides a brief description of how each alternative addresses the Recreation/Tourism Situation in terms of responses to the three primary questions: recreation infrastructure, recreation settings, and decrease in user conflicts. Following the summaries is a graph displaying the distribution of ROS classes for each alternative, a table that displays existing and proposed developed recreation facilities for each alternative, and a graph that displays the dispersed recreation capacity for each alternative.

No Action Alternative

The No Action Alternative allows for opportunities to increase use and development in the Kenai Peninsula and Copper River Delta geographic areas. Prince William Sound emphasizes a wild character and limited development. Recreation settings are primarily Semi-primitive Motorized and Roaded Natural except in Prince William Sound where Semi-primitive Motorized and Primitive II dominate. Few areas are identified to separate motorized and nonmotorized winter or summer recreation activities beyond currently identified areas.

Preferred Alternative

The Preferred Alternative allows for opportunities to increase use and development concentrated along existing road corridors (3/4 mile on either side of roads). Prince William Sound and the Copper River Delta geographic areas emphasize dispersed recreation use and limited development. Recreation settings are primarily Primitive and Semi-primitive Nonmotorized and Motorized away from these corridors. Many areas across the Forest are proposed to be managed to separate motorized and nonmotorized winter and summer recreation activities to reduce user conflicts.

Alternative A

Alternative A allows for opportunities to increase use and development in all geographic areas of the Forest. Recreation settings are primarily Semi-primitive Motorized to Roaded Natural. All geographic areas emphasize motorized recreation activities winter and summer, so no areas are designated for nonmotorized settings.

Alternative B

Alternative B allows for opportunities to increase use and development in Kenai Peninsula and Copper River Delta geographic areas of the Forest. In Prince William Sound, dispersed recreation and limited development are emphasized, except adjacent to Whittier where higher use and development levels are allowed. Recreation settings are primarily Semi-primitive Motorized to Roaded Natural. A few selected areas on the Kenai Peninsula are proposed to be managed to separate motorized and nonmotorized winter and summer recreation activities.

Alternative C

Alternative C allows for opportunities to increase use and development concentrated along existing road corridors (1/2 mile on either side of roads). In Prince William Sound and the Copper River Delta geographic areas, dispersed

recreation use and limited development are emphasized. Recreation settings are primarily Semi-primitive Motorized and Nonmotorized, and Roaded Natural and Modified. Several selected areas on the Kenai Peninsula are proposed to be managed to separate motorized and nonmotorized winter and summer recreation activities.

Alternative D

Alternative D allows for opportunities to increase use and development concentrated along existing road corridors (1/4 mile on either side of roads). In Prince William Sound, the Copper River Delta, and areas outside the roaded corridors on the Kenai Peninsula geographic areas, dispersed recreation use and limited development are emphasized. Recreation settings are primarily Semi-primitive Motorized, Semi-primitive Nonmotorized, Roaded Natural and Roaded Modified. Several selected areas on the Kenai Peninsula are proposed to be managed to separate motorized and nonmotorized winter and summer recreation activities.

Alternative E

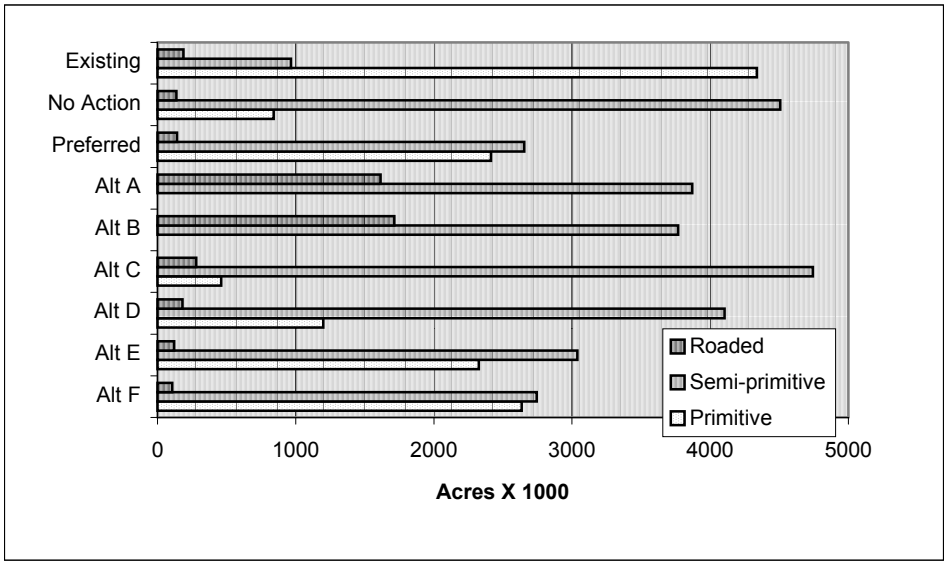
Alternative E allows for opportunities to increase use and development concentrated along existing road corridors (1/4 mile on either side of road). In Prince William Sound, the Copper River Delta, and areas outside the roaded corridors on the Kenai Peninsula geographic areas, dispersed recreation use and limited development are emphasized. Recreation settings are primarily Primitive to Semi-primitive Motorized. Much of the Kenai Peninsula geographic area emphasizes nonmotorized recreation activities winter and summer. Prince William Sound and Copper River Delta have selected areas separating motorized and nonmotorized winter and summer recreation activities.

Alternative F

Alternative F allows for opportunities to increase use and development concentrated along existing road corridors (1/4 mile on either side of road). In Prince William Sound, the Copper River Delta, and areas outside the roaded corridors on the Kenai Peninsula geographic areas, dispersed recreation use and limited development are emphasized. Recreation settings are primarily Primitive to Semi-primitive Nonmotorized. All geographic areas emphasize nonmotorized recreation activities winter and summer, so no areas are designated for motorized settings.

Each alternative's distribution of the major ROS classes is shown in Figure 2-15.

Figure 2-15: Forestwide distribution of ROS classes.



Developed recreation facilities and their capacities provided under each alternative are displayed in Table 2-9a. Developed capacity proposed under all of the alternatives will meet the projected demand.

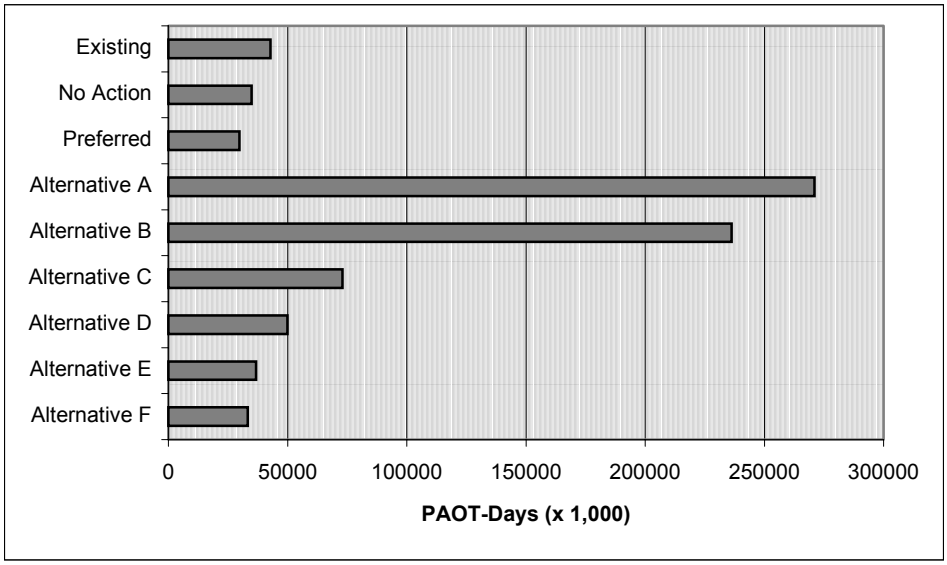
Table 2-9a: Developed recreation facilities by alternative – Forestwide.

	Existing	Alternative							
		No Action	Preferred	Alt. A	Alt. B	Alt. C	Alt. D	Alt. E	Alt. F
CAMPGROUNDS									
PAOT-days	581,122	638,582	621,682	638,582	638,582	638,582	628,442	618,302	618,302
No. of campgrounds	15	19	18	19	19	19	18	17	17
CABINS									
PAOT-days	93,580	131,980	128,380	145,180	145,180	146,380	137,980	128,380	104,380
No. of cabins	43	75	72	86	86	87	80	72	52
DAY USE SITES									
PAOT-days	639,265	652,365	668,490	678,165	657,740	652,365	639,265	639,265	639,265
No. of sites	31	34	38	41	36	34	31	31	31
TRAILHEADS									
PAOT-days	77,344	180,409	218,574	229,684	266,914	239,539	192,454	154,129	127,849
No. of trailheads	27	36	46	41	44	42	41	37	34
DEVELOPMENT NODES									
Backcountry Groups prescription	0	0	2	0	0	18	0	0	0
Semi-primitive Groups ROS	0	0	0	0	0	10	4	3	4

Source: USDA Forest Service INFRA Database.

The capacity for dispersed recreation opportunities (general forest areas not in developed sites) is related to the recreation setting and expectations that people have for particular settings. All of the alternatives assign the Roaded ROS class to the road corridors to allow for construction of developed recreation facilities and to provide for more intense management of recreation opportunities. In all alternatives, the available supply of dispersed recreation opportunities across the Chugach National Forest will greatly exceed the projected demand. In addition to the capacity in road corridors, Alternatives A and B have the highest dispersed capacity and Alternative F the lowest.

Figure 2-16: Forestwide dispersed recreation capacity.

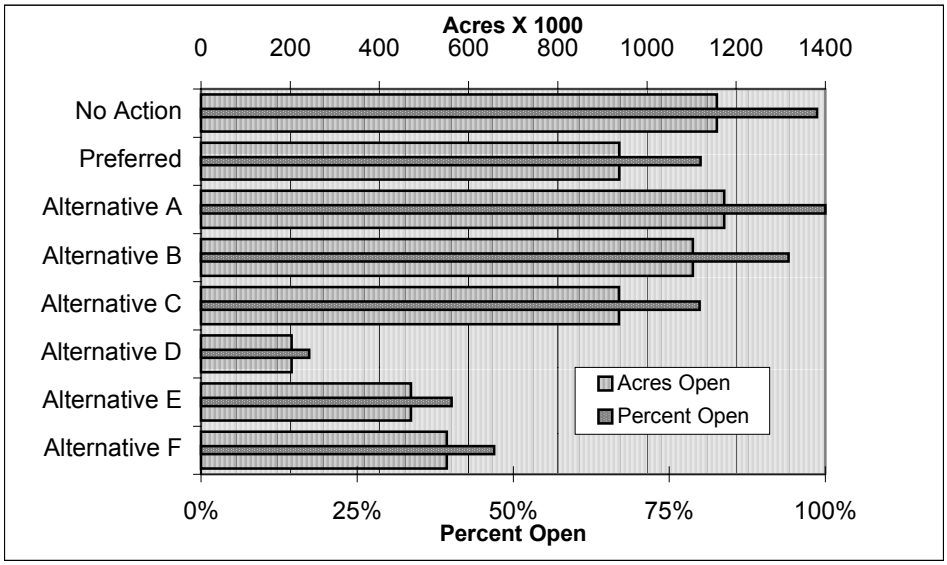


Recreation Conflicts and Situations

The major conflict or situation addressed in the alternatives is the allocation of winter season motorized and nonmotorized activities, and to a lesser degree, the summer season. This conflict is most intense on the Kenai Peninsula. Many of the alternatives were specifically designed to allow or restrict motorized and nonmotorized uses on the Kenai Peninsula.

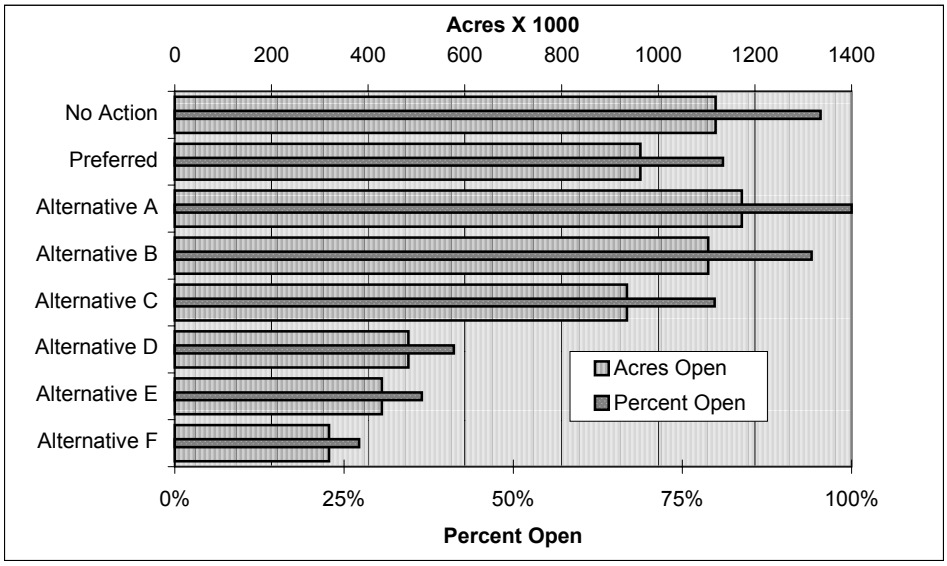
Winter snowmachine use is generally allowed in all alternatives. All of the alternatives, except Alternative A, identify specific areas of varying size that are closed to motorized uses. Acres available for winter snowmachine activities on the Kenai Peninsula, by alternative, are shown in Figure 2-17.

Figure 2-17: Acres available for winter snowmachine activity - - Kenai Peninsula.



Winter helicopter access for heli-skiing is similar to snowmachine use. There are some slight differences, especially in the Preferred and Alternatives D and F. Alternatives D and the Preferred Alternative allocate slightly more area for helicopter access while Alternative F allocates slightly less for helicopter access. Acres available for winter helicopter activities on the Kenai Peninsula, by alternative, are shown in Figure 2-18.

Figure 2-18: Acres available for winter helicopter activities - - Kenai Peninsula.



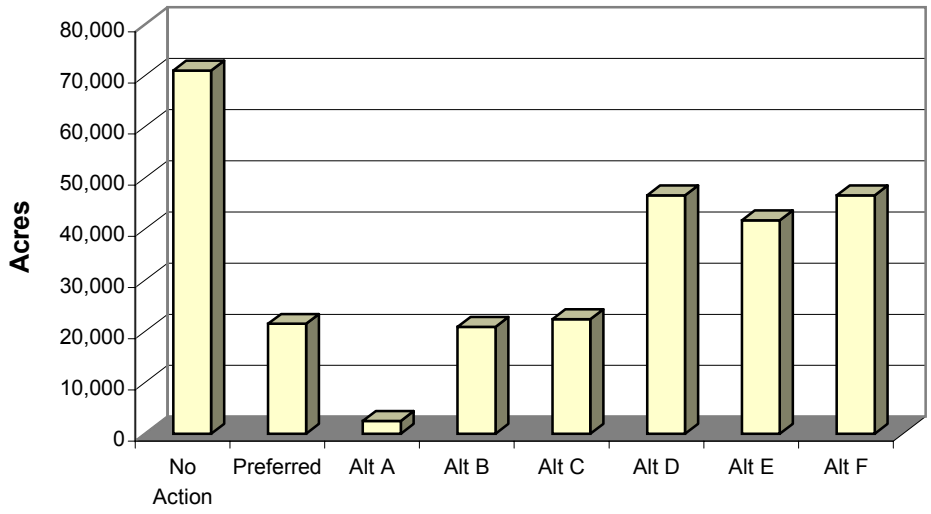
Recommendations for Administrative (Research Natural Areas) and Congressional (Wilderness and Wild and Scenic Rivers) Designation

This situation has three primary components, recommendations for: Research Natural Areas; Wilderness; and, Wild and Scenic Rivers.

Research Natural Areas

The Chugach National Forest currently has one designated Research Natural Area. The eight alternatives recommend differing number acres for Research Natural Areas (Figure 2-19).

Figure 2-19: Recommended and existing Research Natural Areas by alternative (acres).



	No Action	Preferred	Alt A	Alt B	Alt C	Alt D	Alt E	Alt F
Number of RNAs	9	5	1	4	5	8	7	8

Wilderness

The Chugach National Forest currently has no designated Wilderness. The 1984 Forest Plan recommended approximately 1.7 million acres of the ANILCA designated Nellie Juan-College Fiord Wilderness Study Area for Wilderness designation.

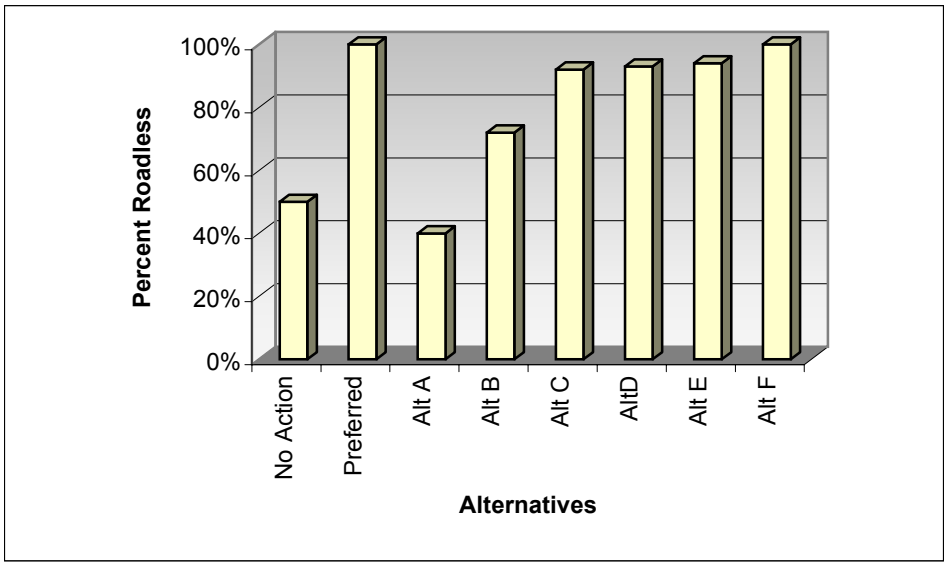
Seven of the eight alternatives recommend some acres for Wilderness designation. Alternative B recommends Wilderness only from within the Nellie Juan-College Fiord Wilderness Study Area. Alternatives C, D, E, F, the No Action Alternative and the Preferred Alternative recommend Wilderness in all the geographic areas of the Forest. Figure 2-20 displays the acres of recommended Wilderness by alternative.

Figure 2-20: Recommended Wilderness by alternative (acres).

Roadless Areas

The Chugach National Forest is approximately 99 percent roadless. The Forest currently has 16 roadless areas totaling 5,434,710 acres. Alternatives C, D, E, F, and the Preferred Alternative allocate the highest amount of roadless areas to management prescriptions that retain roadless value (Figure 2-21).

Figure 2-21: Percent of Forest roadless by alternative.



Wild and Scenic Rivers

Table 2-9b displays the number of miles of rivers recommended for inclusion in the National Wild and Scenic River System. Twenty-three streams are eligible for inclusion into the National Wild and Scenic River System. Appendix D contains the suitability reports for each of the 23 eligible rivers. Alternative F has the most miles of recommended rivers while Alternative A does not make any recommendations.

Table 2-9b: Miles of rivers recommended for inclusion in the National Wild and Scenic River System.

River Classification	Alternative							
	No Action	Preferred	A	B	C	D	E	F
Recreational	0	22.4	0	35.1	16.5	0	7.0	15.9
Scenic	0	19.3	0	0	73.6	68.1	83.8	99.2
Wild	0	40.7	0	0	2.0	68.3	224.9	235.2
Total	**0**	**82.4**	**0**	**35.1**	**92.1**	**136.4**	**315.7**	**350.3**

Subsistence

Subsistence hunting, fishing, trapping and gathering activities on the Chugach National Forest represent a major focus of life for many Southcentral Alaskan residents. The rural communities of Hope, Cooper Landing, Tatitlek, Whittier, Chenega Bay, and Cordova are all dependent to differing degrees on the wild resources. The three components of the Subsistence Situation are:

Is there a continued abundance and distribution of the wild resources needed for subsistence?

Continued abundance and distribution were evaluated using a two-step process. First the alternatives were screened to determine whether there could be a restriction in subsistence activities based on fish and wildlife habitat value compared to the intensity of management. Using this process Alternatives C, D, E, F and the Preferred Alternative were found to have no potential impact on the abundance and distribution of fish and wildlife. The second filter compared areas where management intensities were higher to the habitat values within specific community use areas. By rank order, Alternatives A, No Action, and B had slightly higher likelihood of a reduction of deer habitat values used by two communities, Cordova and Cooper Landing. By comparison, moose habitat enhancement opportunities are greater in Alternatives A, No Action, and B. Overall, all alternatives are expected to maintain habitat values for fish and wildlife used for subsistence activities.

Will access to subsistence resources continue to be available?

None of the alternatives limit access to public lands for the purposes of subsistence gathering activities. The Preferred Alternative proposes one area where motorized subsistence access would not be permitted. Alternatives C, D, E, and F propose two areas. These areas have low capability for both summer and winter motorized uses, due to environmental and safety factors. Such restrictions are not likely to lead to a significant possibility of a significant restriction of subsistence access to the resources.

Will management action result in an increase in competition from non-rural hunters and anglers?

Competition for wildlife and fisheries resources near rural communities results from the combination of factors. For analyzing competition, the following assumptions are made: 1) New road construction adjacent to existing road systems where inter-ties between non-rural communities exist would result in increased competition from surrounding communities associated with the inter-connected roads, and 2) New road construction adjacent to communities with ferry access would result in increased competition from outside communities. Alternatives A and B are the only Alternatives with new roads meeting these criteria. In Alternatives A and B the amount of habitat with new road access is less than one percent of available habitat. Significant restrictions to the subsistence harvest from increased competition from non-rural users are not likely.

Based on the analysis above, activities allowed under all alternatives do not present a significant possibility of a significant restriction on subsistence use of

wild resources on the Forest. This finding is based on the potential resource effects by the three evaluation categories: abundance and distribution, access, and competition.

Program Levels and Budget Allocations

Table 2-10 displays the total number of acres in management prescriptions by alternative. Table 2-11 displays the anticipated outputs under the full implementation level.

In Chapter 3, programs and effects are yearly averages for the planning horizon (50 years) at the full implementation level unless otherwise noted. Programs are based on best current information. For example, wildlife habitat improvement acres are based on the current 5-year wildlife habitat improvement program. The program activities and outcomes were adjusted depending on emphasis in the alternative.

Table 2-12 displays the budget (dollars) needed to implement each alternative and compares these levels to the current budget. The analysis used the new Budget Formulation and Execution System (BFES). Data for the analysis came from the FEIS, Interdisciplinary Team members, and the FY 2003 out-year budget request that was developed in BFES. Generally, the BFES data can be used to determine estimated unit cost for outputs. It was necessary to obtain output information for some BFES activities fro the ID Team members because not all activity outputs were specifically described in the FEIS and a full set of BFES activity outputs was required to complete the analysis (see FEIS, Appendix B, Description of the Analysis Process).

In Table 2-12 there are references to the BFES terms P1, P2, P3, and P4. Each represents a specific Forest constraint level used in the planning process. P2 was intended to represent the FY 2001 final allocation level although in reality it was slightly lower at the Forest (approximately 5 percent) because of some regional level commitments. P1 was 90 percent of P2, P3 was 125 percent of P2, and P4 was defined as monetarily unconstrained.

Conclusions Applicable to the Operational and Maintenance Activities (except Wilderness)

1. No alternative identified can be implemented at the FY 2001 funding level.
2. The Preferred and several other alternatives in the FEIS can be implemented at a 125 percent of FY 2001 funding.
3. All alternatives can be implemented at the 135 percent of FY 2001 funding.
4. Comparing the Fund Code distribution reflected in the BFES data with the need reflected in the Preferred Alternative indicates the predominate short falls are in Recreation Management, Fuels Treatment, Facilities and Trails maintenance, and Ecosystem Management.

Conclusions Applicable to the Construction and Improvement Activities

1. No alternative identified can be implemented at FY 2001 funding levels with regular funds.
2. An increase in the regional pool constraints of at least 100 percent would be required to fund the Preferred Alternative.
3. Congressional interest in providing special funding for backlog maintenance activities in programs outside this analysis may resolve some or all of the gaps between the Preferred Alternative and FY 2001 funding levels.

Table 2-10: Total number of acres in management prescriptions by alternative.

Management Prescription	Alternative							
	No Action	Preferred	A	B	C	D	E	F
111 Primitive	0	11,750	0	25,720	22,900	22,790	91,580	0
121 Wilderness Study Area	0	0	0	0	0	0	0	0
131 Recommended Wilderness	1,592,690	1,413,350	0	865,000	1,027,590	1,628,240	2,167,090	4,157,060
132 Wild River	0	12,180	0	0	140	76,650	205,340	268,540
133 501(b) - Recommended Wilderness	0	442,490	0	0	340,580	856,550	1,256,190	0
135 501(b) - 1	0	445,170	0	0	0	0	0	0
141 Research Natural Area	69,460	23,730	2,550	20,910	22,430	46,610	41,710	46,610
210 Backcountry*	0	1,818,890	0	0	0	0	0	0
211 Backcountry	529,530	0	0	363,300	1,044,870	947,890	944,560	423,990
212 Backcountry Motorized	0	0	2,044,970	1,153,270	1,177,780	653,300	195,050	137,750
213 501(b) - 2	420,890	660,940	0	1,157,180	1,213,800	631,030	294,010	0
221 EVOS Acquired Lands	102,040	102,040	102,040	102,040	102,040	102,040	102,040	102,040
231 Scenic River	0	14,270	0	0	77,770	74,560	33,620	33,620
241 Municipal Watershed	960	960	960	960	960	960	960	960
242 Brown Bear Core Area	0	70,360	18,150	29,650	29,650	113,910	0	46,960
244 Fish and Wildlife Conservation Area	108,620	260,640	29,460	64,480	142,760	208,850	122,480	236,470
312 Fish, Wildlife and Recreation	1,529,910	159,820	868,880	1,233,180	238,760	104,790	17,490	13,780
313 Backcountry Groups [2]	0	0	0	0	0 [2]	0	0	0
314 Forest Restoration	0	20,770	289,970	40,520	16,670	0	0	0
321 501(b) - 3	1,124,720	15,380	1,564,260	411,680	10,880	6,280	3,730	3,930
331 Recreational River	0	6,080	0	10,930	5,590	0	2,970	5,350
341 Developed Recreation / Reduced Noise	0	0	0	0	0	4,370	0	1,760
411 Resource Development	0	0	557,580	0	3,650	0	0	0
441 Developed Recreation Complexes	0	0	0	0	0	0	0	0
521 Minerals (site specific)	6,860	6,860	6,860	6,860	6,860	6,860	6,860	6,860
522 Major Transportation / Utility Systems (site specific)	5,900	5,900	5,900	5,900	5,900	5,900	5,900	5,900
Total	**5,491,580**	**5,491,580**	**5,491,580**	**5,491,580**	**5,491,580**	**5,491,580**	**5,491,580**	**5,491,580**

[1] The Wilderness Study Area will be managed as described in this prescription until Congress removes the designation. There are 1,746,970 acres so designated.
[2] Alternative C includes 22 potential Backcountry Group sites; the Preferred Alternative includes 2 potential Backcountry Group sites.

Table 2-11: Projected outputs for key activities under full implementation level by alternative.

MANAGEMENT ACTIVITIES	Units	Base Levels	No Action	Pref	A	B	C	D	E	F
SOIL and WATER MANAGEMENT										
Soil and Water Improvements	Acres/Year		40	30	50	40	40	30	20	20
FISH MANAGEMENT										
Anadromous Habitat	Miles		82	82	82	82	82	82	82	82
	Acres		1,722	1,722	1,722	1,722	1,722	1,722	1,722	414
Riparian Zones (3-2-A)	Acres/Year		222	222	222	222	222	124	93	93
Inland Fish Habitat	Miles		0	0	0	0	0	0	0	0
	Acres		391	391	391	391	391	391	258	191
Riparian Zones (3-2-B)	Acres/Year		25	25	25	25	25	14	11	11
WILDLIFE MANAGEMENT										
Prescribed Burning	Acres/Year		2,248	2,248	2,248	2,248	2,248	1,558	910	920
Mechanical Treatment	Acres/Year		384	323	384	384	384	236	137	140
PERSONAL and COMMERCIAL TIMBER USE										
Full Implementation Funding - Even Aged Harvest	Acres/year		296	0	617	234	0	0	0	0
Full Implementation Funding - Uneven Aged Harvest	Acres/year		675	375	913	770	426	355	260	235
Total Program Quantity - Full Funding	Acres/year		971	375	1,530	1,004	426	355	260	235
	MMCF		2.23	0.43	4.18	1.93	0.43	0.31	0.25	0.23
	MMBF		9.70	1.51	19.00	8.61	1.71	1.00	0.80	0.70
MINERALS MANAGEMENT										
Plans of Operations	Plans/Year		80	80	80	80	80	80	80	80
Miles of Road Construction	Miles/Year		0	0	0	0	0	0	0	0
TRAVEL MANAGEMENT										
Total Road Miles available - End of First Decade	Miles		170	129	217	232	139	119	113	110
Total Road Miles available- Mid-decade	Miles	140	137	113	160	181	125	108	105	104
Road Construction - Miles per year	Miles/Year		6.7	3.3	11.4	10.0	2.9	2.2	1.6	1.3
Roads Construction Associated with Timber Harvest	Miles/Year		4.4	0.0	8.1	3.4	0.0	0.0	0.0	0.0
Roads Construction Associated with Facilities	Miles/Year		2.2	3.2	3.2	3.1	2.8	2.2	1.6	1.3
Other Road Construction	Miles/Year		0.0	0.0	0.0	1.6	0.0	0.0	0.0	0.0
Trails Converted to Roads	Miles/Year		0.1	0.1	0.1	1.9	0.1	0.0	0.0	0.0
Total Trail Miles - Ten Year Total										
Winter Miles Avail. (includes roads closed to hwy vehicles)	Miles	659	737	868	868	954	944	874	758	692
Motorized	Miles	345	361	639	639	686	573	405	452	426
Nonmotorized	Miles	314	376	230	230	269	371	469	306	267
Summer Miles Avail. (includes roads closed to hwy vehicles)	Miles	555	633	764	764	788	833	777	661	595
Motorized	Miles	24	52	77	77	282	135	9	6	7
Nonmotorized	Miles	531	581	688	688	505	698	768	655	589
Trail Construction	Miles/Year		7.8	21.7	20.9	23.2	27.8	22.2	10.6	4.0
RECREATION AND WILDERNESS MANAGEMENT										
Developed Capacity - End of First Decade	MM PAOT-days	1.34	1.79	1.75	1.92	1.94	1.89	1.77	1.57	1.55
Recreation Visits										
Developed Visits	MM Visits/Year	2.83	3.55	3.55	3.55	3.55	3.55	3.55	3.55	3.55
Dispersed Visits	MM Visits/Year	5.31	4.69	4.36	6.60	5.56	5.37	4.64	4.00	1.61
Wilderness Visits	MM Visits/Year	0.00	1.91	2.24	0.00	1.04	1.23	1.96	2.60	4.99
Total Visits	**MM Visits/Year**	**8.14**	**10.15**	**10.15**	**10.15**	**10.15**	**10.15**	**10.15**	**10.15**	**10.15**
FUELS MANAGEMENT										
Prescribed Burning	Acres/Year		400	400	400	400	400	400	400	400

Table 2-12: Fund code distributuion by alternative for full implementation, based on BFES activities and costs.

Program Code	Total Costs No Action	Total Costs Preferred	Total Costs Alt. A	Total Costs Alt. B	Total Costs Alt. C	Total Costs Alt. D	Total Costs Alt. E	Total Costs Alt. F	FY2001 Funding w/ BFES Distribution	125% FY2001 Funding w/ BFES Distribution	FY2001 Less the Preferred	125% FY2001 Less the Preferred
Operation and Maintenance Activities [1]												
NFFN Total	$ 409,000	$ 409,000	$ 409,000	$ 409,000	$ 409,000	$ 409,000	$ 409,000	$ 409,000	$ 216,000	$ 247,000	($193,000)	($162,000)
NFIM Total	1,575,000	1,575,000	1,575,000	1,575,000	1,575,000	1,575,000	1,575,000	1,575,000	986,000	1,366,000	(589,000)	(209,000)
NFRW Total [2]	4,656,427	4,645,195	4,692,929	4,698,545	4,684,505	4,650,811	4,594,654	4,594,654	2,661,000	3,636,000	(1,984,195)	(1,009,195)
NFWF Total	2,954,544	2,951,478	2,954,544	2,954,544	2,953,522	2,996,446	2,922,862	2,845,774	2,876,000	3,875,000	(75,478)	923,522
NFTM Total	167,845	59,824	288,176	138,991	59,824	39,997	37,417	36,557	181,000	185,000	121,176	125,176
SSSS Total	0	0	0	0	0	0	0	0	0	0	0	0
NFVW Total	981,356	913,595	1,042,526	981,356	981,356	775,820	670,878	473,748	1,103,000	1,455,000	189,405	541,405
NFMG Total	471,400	471,400	471,400	471,400	471,400	471,400	471,400	471,400	541,000	617,000	69,600	145,600
NFLM Total	1,232,871	1,232,871	1,241,871	1,241,871	1,241,871	1,232,871	1,232,871	1,232,871	915,000	1,309,000	(317,871)	76,129
WFHF Total	1,049,796	1,231,200	1,241,460	1,241,460	1,238,040	1,009,886	791,251	562,205	654,000	986,000	(577,200)	(245,200)
CMRD Mtnc. Total	521,240	522,440	521,240	765,754	513,160	516,280	517,520	516,280	559,000	810,000	36,560	287,560
CMTL Mtnc. Total	1,188,000	1,328,000	1,320,000	1,344,000	1,388,000	1,332,000	1,216,000	1,150,000	828,920	828,920	(499,080)	(499,080)
CMFC Mtnc. Total	1,623,000	1,623,000	1,623,000	1,623,000	1,623,000	1,623,000	1,623,000	1,623,000	1,235,000	1,755,000	(388,000)	132,000
Total	**$16,830,479**	**$16,963,003**	**$17,381,146**	**$17,444,921**	**$17,138,678**	**$16,632,511**	**$16,061,853**	**$15,490,489**	**$12,755,920**	**$17,069,920**	**($4,207,083)**	**$106,917**
Construction and Improvement Activities [1,3]												
CMFC Const. Total	$3,784,275	$4,058,775	$4,502,775	$4,357,775	$4,146,275	$3,751,775	$3,098,775	$2,993,775	$1,596,046	$2,039,392	($2,462,729)	($2,019,383)
CMRD Const. Total [4]	690,100	319,300	1,174,200	1,030,000	298,700	226,600	164,800	133,900	0	0	(319,300)	(319,300)
CMTL Const. Total	1,036,568	2,482,854	2,369,997	2,595,711	3,159,996	2,482,854	1,241,427	518,284	1,100,000	1,500,000	(1,382,854)	(982,854)
Total	**$5,510,943**	**$6,860,929**	**$8,046,972**	**$7,983,486**	**$7,604,971**	**$6,461,229**	**$4,505,002**	**$3,645,959**	**$2,696,046**	**$3,539,392**	**($4,164,883)**	**($3,321,537)**

[1] Negative numbers indicate shortfall in funding to implement Forest Activities.

[2] Analysis assumes additional constraint will be provided when Congress designates Wilderness Areas

[3] Construction and Improvement Funds are managed as Regional Pools

[4] Road and Facilities Pools combined Regional Constraint in FY 2003